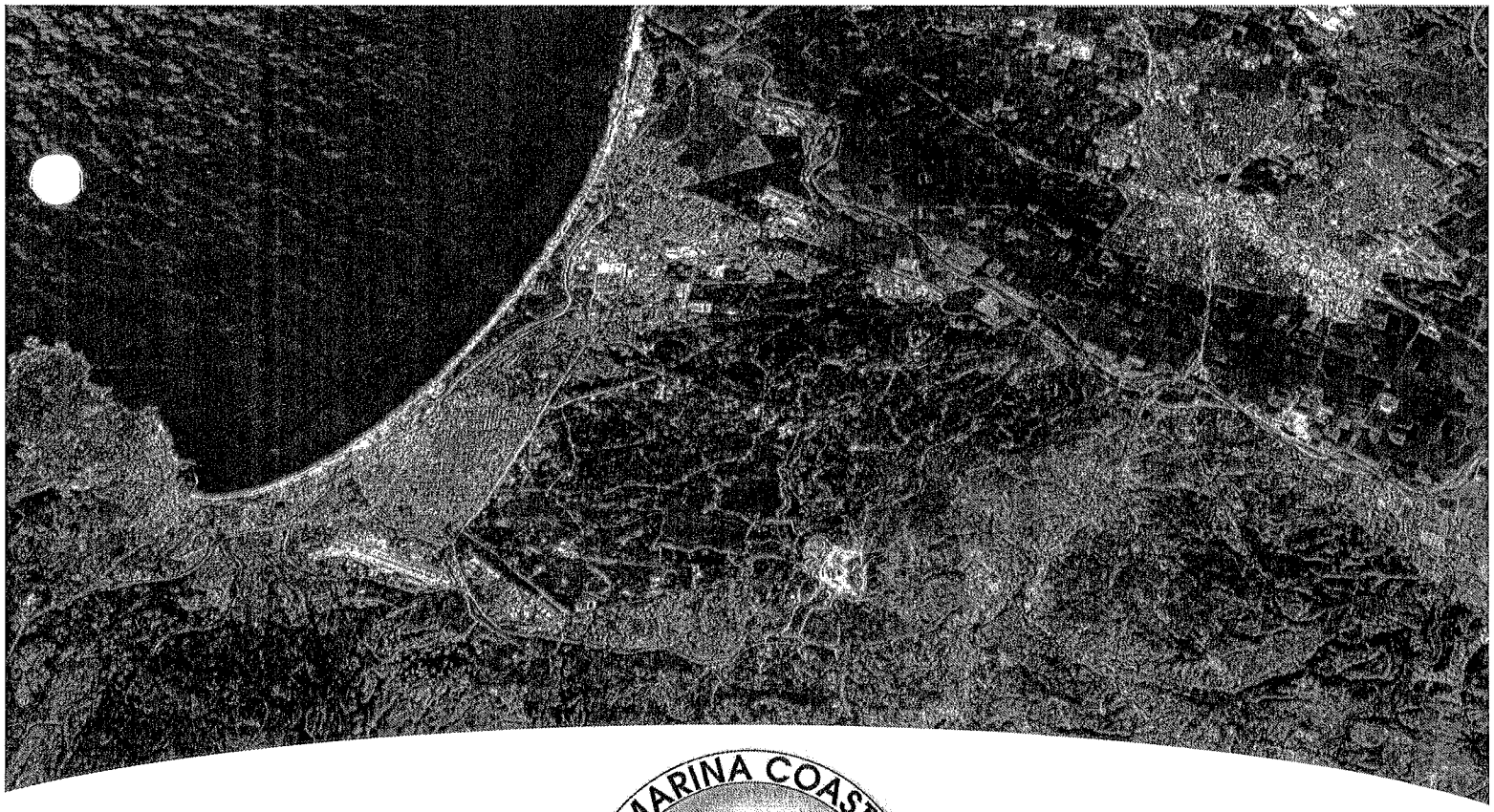

Proposal for Professional Services
Water Augmentation Alternatives Study: Former Fort Ord Area

Marina Coast Water District

22 March 2018

EKI B7-160

eki environment & water

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22 March 2018

Mr. Mike Wegley
Marina Coast Water District
11 Reservation Road
Marina, CA 93933

Subject: Proposal for Professional Services
Water Augmentation Alternatives Study
Former Fort Ord Area
Monterey County, California
(EKI B7-160)

Dear Mr. Wegley:

EKI Environment & Water, Inc. ("EKI"; formerly known as Erler & Kalinowski, Inc.) is pleased to provide the Marina Coast Water District ("MCWD" or "Client") with this scope of work for the Water Augmentation Alternatives Study to supply water to the former Fort Ord area.

EKI understands that MCWD participates in a joint, regional three-party planning ("TPP") process with the Fort Ord Reuse Authority ("FORA") and the Monterey Regional Water Pollution Control Agency ("MRWPCA") for purposes of water supply planning for the redevelopment of the former Fort Ord area. In January 2017, FORA issued a Request for Proposals ("RFP") to perform a Water Augmentation Alternatives Study as a part of the TPP process; however, no contract was awarded. Given EKI's familiarity with water resources in the region and prior water augmentation studies conducted on behalf of MCWD, EKI has submited a scope of work to perform a Water Augmentation Alternatives Study generally consistent with the January 2017 RFP.

EKI understands that one of the mitigation measures identified in the Final Environmental Impact Report ("EIR") for the Fort Ord Base Reuse Plan and Master Resolution ("BRP") is the development of 2,400 acre feet per year ("AFY") of additional water supply for the Ord Community[1]. The Three Parties have worked together over the years to identify and secure the necessary water supplies.

In 2005, the FORA and MCWD Boards of Directors both approved the Regional Urban Water Augmentation Project ("RUWAP") Hybrid Alternative, which included recycled water and desalination supply components providing 1,200 AFY each. FORA and MCWD then agreed upon a modified RUWAP Hybrid Alternative that would provide 1,427 AFY of recycled water to the former Fort Ord. The FORA Board Resolution No. 07-10 (May 2007) allocated the 1,427 AFY of RUWAP recycled water to the various land use jurisdictions.

[1] Marina Coast Water District 215 Urban Water Management Plan, prepared by Schaaf & Wheeler, dated June 2016.

In 2015, the FORA Board of Directors endorsed a joint water supply planning process between FORA, MRWPCA, and MCWD to identify the "Additional Water Augmentation Component." In 2016, MCWD, MRWPCA, and FORA entered into an agreement to fund an analysis to identify alternatives to supply the additional 973 AFY of Water Augmentation (i.e., to get to the total of 2,400 AFY required by the EIR). The Three Parties (FORA, MCWD, and MRWPCA) recognize there are potentially several options to meet the 973 AFY "Additional Water Augmentation Component." The purpose of this study is to systematically identify what the potential options and opportunities are, which will result in a significant positive impact for the region.

The January 2017 RFP issued by FORA included a very thorough and detailed scope of work (provided in Attachment A), which included the following tasks:

Task 1: Project Administration
Task 2: Background Survey
Task 3: Economic Constraints and Strategy Assumptions
Task 4: Establish the Alternatives Analysis Ground Rules
Task 5: Water Augmentation and Alternatives Analysis
Task 6: Strategy Recommendations[2]
Task 7: Final Reports[3]

The scope of work proposed by EKI is generally consistent with the January 2017 RFP scope and reflects our understanding of the study goals and objectives. To the extent that our proposed scope differs significantly from the January 2017 RFP scope, we have provided additional discussion regarding the recommended alternative approach. In addition, we have included a supplemental task that includes the evaluation of potential water augmentation sites in the vicinity of Fort Ord (Task 6, below).

As detailed further below, we have proposed a consolidated set of deliverables and a progress-driven, workshop-based approach to project development. Specifically, for each major task, we have proposed to present our findings at a workshop to solicit feedback from the Three Parties (e.g., FORA, MCWD, and MRWPCA, or their Technical Advisory Group ["TAG"]). Following each workshop, we will prepare a draft technical memorandum ("TM") for review and comment by the Three Parties. Feedback on the draft TMs will then be reflected in the draft report prepared as a part of Task 8, and comments on the draft report will be incorporated into the final report. Thus, for each major set of results, the Three Parties will have three opportunities to provide feedback. We have utilized this progress-driven, workshop-based approach on numerous projects that involve similar sets of interested stakeholder parties, and find it to be a very effective method to foster collaboration and achieve transparency and results.

[2] Included as Task 7, below.
[3] Included as Task 8, below.

EKI QUALIFICATIONS

EKI is an employee-owned consulting company that has provided comprehensive engineering, environmental, and water resources services to public and private sector clients throughout California and the United States since its founding in 1989. We have successfully completed several projects for MCWD in 2016 and 2017, including:

- A Preliminary Feasibility Assessment to Conduct Augmented Groundwater Recharge at the Armstrong Ranch Property;
- An Evaluation of Groundwater Remedial Actions and Establishment of Remedial Goals at Fort Ord, Marina Coast Water District, California; and
- A review of the California American Water ("CalAm") Monterey Peninsula Water Supply Project Draft Environmental Impact Report and Environmental Impact Statement.

EKI is also currently conducting a Groundwater Sustainability Planning Study to aid MCWD in meeting requirements of the Sustainable Groundwater Management Act ("SGMA"). As part of the SGMA Planning Study, EKI is conducting a preliminary assessment of available information to support preparation of the required Basin Setting components of a Groundwater Sustainability Plan ("GSP") for the Monterey Subbasin. The Basin setting components of the GSP will include a Hydrogeologic Conceptual Model ("HCM"), description of groundwater conditions, and water budget. This information will be particularly useful in evaluating potential water supply augmentation options (especially those that involve groundwater recharge) and data gaps that will need to be assessed to support the scope of work identified herein.

We have included a statement of qualifications ("SOQ") packet, which include descriptions of services EKI provides, resumes for key personnel that will be involved in this project, and descriptions of similar and relevant projects completed by EKI, including contact information for references, as Attachment B to this proposal. As identified in the SOQ, our broad range of experience coupled with our local knowledge makes us uniquely well qualified to perform the evaluations described in the scope of work below.

PROPOSED SCOPE OF WORK

EKI will perform Tasks 1 through 8 as described below.

TASK 1 – PROJECT ADMINISTRATION

This task includes project management and communication activities associated with this study, including:

- Participation in a project kickoff meeting and preparation of meeting minutes,
- Monthly progress reporting,
- Tracking of project budget and schedule, and
- Coordination with Client.

In addition to the project kickoff meeting, EKI will prepare for and lead up to five (5) progress-driven workshops for the Three Parties and/or the TAG.[4] Scope and budget for these workshops are included in the tasks below.

Monthly progress reports to Client will include the following:

- Actions completed,
- Current status,
- Schedule updates,
- Budget updates by task, including estimates of percentage completed/remaining, and
- Proposed action plans (i.e., next steps).

EKI incorporates senior review throughout all of our projects to maintain a high level of quality assurance and quality control ("QA/QC"), for technical content and document readability and clarity. Such a review process will be utilized for this project. Resumes of senior project staff that will lead the QA/QC efforts are provided in our SOQ (Attachment B).

Task 1 Anticipated Deliverables:

1) *Project kick-off meeting and meeting minutes*
2) *Monthly progress reports*

TASK 2 – BACKGROUND SURVEY: WATER SUPPLY AUGMENTATION PROGRAM HISTORY AND CURRENT STATUS

Task 2-1: Report Compilation and Bibliography

Numerous water feasibility studies, water supply assessments, alternative studies, and technical reports have been completed within Monterey County that are potentially relevant to the Fort Ord area. To prevent re-doing work completed in previous studies, and to benefit from the valuable data collection and analysis already completed, EKI will compile relevant documents. Documents anticipated to be compiled as part of this task include, but are not limited to:

- Water feasibility studies, water supply assessments, alternative studies, etc. completed within Monterey County;
- Water source, supply and augmentation studies including feasibility, conservation and water demand studies from Santa Cruz County and San Luis Obispo County;
- The MCWD Water Master Plan currently being developed by Akel Engineering Group, Inc.,
- Fort Ord reuse planning documents;
- Any additional documents provided by FORA, MCWD, and/or MRWPCA; and

[4] The proposed scope and budget does not include attendance at FORA Technical Advisory Committee, Administrative Committee, or Board meetings.

- Current local policies, and state and County laws and policies that guide water augmentation planning in Monterey County.

EKI assumes that all relevant documents will be provided by FORA or publicly accessible on the internet. The documents identified as part of this effort will be compiled into a database of available resources, in an electronic format. The database will include a bibliography of the documents compiled as part of this effort and PDF of each document, including a hyperlink[5] to the location of each document.

QA/QC of the bibliography will be conducted for any duplicate records and general checking of the document citations for uniform formats and parameters. A summary of the documents identified through this process will be included in the draft TM (TM1) and final report (Task 7).

Task 2-2: Review and Summary of Compiled Documents

EKI will review the documents identified above for information relevant to this analysis, including the following:

- The basis for the Water Augmentation program based on documents including the BRP, the U.S. Army's 1993 Environmental Impact Statement ("EIS"), the BRP EIR, the Public Facilities Implementation Plan ("PFIP"), and associated documents; and
- RUWAP history, including political environment, assumptions, constraints, risks, issues, and opportunities with the project, with a particular focus on alternative water supply options.

This information will be summarized and presented at Workshop 1 and included in draft TM 1. The summary will include a description of any data gaps identified during the review.

Task 2-3: Preparation of Map Illustrating Key Potential Water Supply Augmentation Project Features

As a first step to understanding the potential feasibility of potential water supply augmentation projects, EKI will prepare a geographic information system ("GIS") map illustrating key water supply augmentation features, to the extent the data are made available by Client and other entities.[6] EKI has assumed a certain level of effort to digitize and import such data into GIS. To the extent that data are provided in georeferenced format (i.e., ArcGIS or CAD), the level of effort may be less. The water supply augmentation feature summary map will be presented in Workshop 1 and included in draft TM 1.

[5] The bibliography will utilize relative pathway hyperlinks that will link to PDFs saved on the user's computer. The bibliography and document PDFs will be transmitted to Client as a complete zipped folder that can be distributed as appropriate. The compiled documents will not be hosted by EKI on the internet.

[6] This map will show high level, key features that are relevant to potential water supply augmentation projects. It is not anticipated that this map will show detailed infrastructure features such as utility lines and catch basins or property ownership data.

Task 2 Anticipated Deliverables:

1) *Bibliography and associated reports (Document PDFs and bibliography with hyperlinks)*
2) *Map of Key Potential Water Supply Augmentation Project Features*
3) *Workshop 1 to present and solicit feedback on Water Supply Augmentation Program History and Current Status*
4) *Draft TM 1: Water Supply Augmentation Program History and Current Status*

TASK 3 – ECONOMIC CONSTRAINTS AND STRATEGY ASSUMPTIONS

The January 2017 RFP scope includes a task to identify public funding and financing options for the various water supply augmentation options and to review potential funding mechanisms and rate structure options. The water supply alternative selected as part of this process for development or additional evaluation may be eligible for a number of public funding sources; however, the funding opportunities available at the time of project implementation will likely be different than those available currently. For example, alternatives that involve groundwater recharge may be eligible for Proposition 1 funding (potentially available through mid-2018) or Park-Water Bond funds (a California ballot measure to be voted on in June 2018). Further, the eligibility of a project for these monies depends on the lead agency implementing the project (e.g., a water retail agency, a Groundwater Sustainability Agency ["GSA"], or a base reuse authority).

EKI recognizes that securing funding will be a critical step in the planning and implementation of any selected water supply alternative. However, given that the potential funding mechanisms are highly contingent on the water supply alternative selected, the timing of an application for such monies, and the alternative's lead entity, we believe that it will be more effective to conduct such an evaluation following the completion of this scope of work. Therefore, scope and budget to complete this task are not included herein.

Task 3 Anticipated Deliverables:
None

TASK 4 – ESTABLISH THE ALTERNATIVES ANALYSIS GROUND RULES: STRATEGIC GOALS AND EVALUATION CRITERIA AND BASELINE AND WATER SUPPLY ALTERNATIVES

Task 4-1: Identify Strategic Goals

EKI will work with the Three Parties to identify thirty- (30-) year strategic goals for the Water Augmentation Program for the former Fort Ord, against which the alternatives will be assessed under Task 5. The strategic goals will include identification of a target time horizon for implementation, time-bound objectives, key milestones, and regulatory constraints. Key challenges, risks, issues, and opportunities will be considered in the development of these strategic goals, with an emphasis on projects that generate a positive regional impact. The strategic goals identified will be refined in Workshop 2 and documented in draft TM 2 and the final report.

Task 4-2: Identify Baseline and Water Supply Alternatives

EKI will work with the Three Parties to identify the baseline against which the alternatives will be compared. One water supply augmentation alternative will be identified as the baseline and the baseline will be assessed against the target goals and objectives and the specific ranking and weighting criteria that are developed. At least three potential water supply augmentation alternatives will be identified and compared against the target goals and the baseline. Alternatives may include groundwater recharge of stormwater, surface water, or recycled water, desalination, water conservation, and others. For each identified alternative, key feasibility questions will be defined, and assumptions and constraints will be identified. The identified baseline and alternatives will be refined in Workshop 2 and documented in draft TM 2 and the final report.

Task 4-3: Develop Evaluation Criteria and Weighting Metrics

Through the workshop process, EKI will work with the Three Parties to develop consensus on evaluation criteria by which alternatives will be assessed. It is anticipated that weighting and metrics will be developed for the following criteria (list may be refined based on input from stakeholders):

- Cost Effectiveness;
- Value;
- Ability to Engage with Other Alternatives;
- Ability to Engage with Existing Systems;
- Relative Cost;
- Implementation Feasibility;
- Energy Usage;
- Environmental Acceptance;
- Ease of Risk Mitigation;
- Maintainability; and
- Time to Implement.

The development and weighting of these criteria will consider economic and energy impacts of global climate change (seawater rise, aquifer impacts), and potential changes due to geography (erosion, inland locations, etc.). The evaluation criteria and weighting metrics will be refined during Workshop 2 and documented in draft TM 2 and the final report.

Task 4 Anticipated Deliverables:

1) *Workshop 2 to present and solicit feedback on Alternatives Analysis Ground Rules*
2) *Draft TM 2: Alternatives Analysis Ground Rules: Strategic Goals and Evaluation Criteria and Selected Baseline and Water Supply Alternatives*

TASK 5 – WATER SUPPLY AUGMENTATION ALTERNATIVES ANALYSIS

With input from the Three Parties, EKI will conduct an analysis of the Baseline and water supply alternatives that will be sufficiently detailed and rigorous to permit independent comparative evaluation of the benefits, costs, and environmental risks of the baseline and each reasonable alternative. An alternative may consist of a 'portfolio of alternatives' or a mix of solutions, depending on the final list of alternatives developed as part of Task 4. Information (qualitative or quantitative) will be developed for each of the criteria defined in Task 4, weighted according to an agreed-upon basis and then compared as described below.

Task 5-1: Evaluate Requirements and Feasibility of Alternatives

For each of the alternatives, EKI will summarize and evaluate the technical requirements, design, and regulatory constraints. The feasibility of implementation for each alternative will be evaluated based on whether the Alternatives are technically, financially, and operationally viable within the regulatory constraints. The results of this analysis will be documented in draft TM 3 and the final report.

Task 5-2: Cost/Benefit Analysis

EKI will perform a Cost/Benefit analysis for each Alternative. This analysis will determine the economics of each option, the potential scope, cost to implement and direct/indirect costs of operation. The cost/benefit analysis will include the following.

- A description of the planned approach for addressing the fully burdened cost to implement each Alternative.
- A description of the approach to the life-cycle cost (or total ownership cost).
- Cost estimates will be presented in constant dollars, adjusted for discounting (time value of money) and account for the distribution of the costs over 30 years.
- The cost estimates will account for any life cycle costs associated with capital assets that have remaining useful value at the end of the period of analysis.
- A sensitivity analysis will be performed for the critical assumptions and a range of potential costs will be identified for each alternative.
- Summary of the impact and benefits for each jurisdiction/agency/district.
- For each identified beneficiary, the realized benefit(s) that would accrue because of Client's Water Augmentation program will be summarized qualitatively.

The cost/benefit analysis will be documented in draft TM 3 and the final report[7].

[7] Estimated construction costs furnished by EKI represent EKI's judgment as a design professional. However, neither Client or EKI has control over fluctuations in construction costs, a contractor's methods of determining bid prices, market and bidding conditions, and other factors. Accordingly, EKI does not guarantee or warrant that the bids or negotiated prices will not vary from any estimated costs provided by EKI.

Task 5-3: Effectiveness Analysis

EKI will perform an effectiveness analysis for each alternative, and summarize the analytic approach to the analysis. This assessment will include a sensitivity analysis to determine what critical assumptions drive the results of the analysis, and how variations in these assumptions affect the results. The sensitivity of the outcomes to the assumed performance estimates will be summarized.

Task 5-4: Cost vs. Effectiveness Comparative Analysis.

EKI will compare the Alternative costs to the Alternative effectiveness developed per the analyses described above. The results of this comparison analysis will be summarized and presented in a table and/or chart, and will be documented in draft TM 3 and the final report.

Task 5 Anticipated Deliverables:

1) *Workshop 3 to present and solicit feedback on Alternatives Analysis*
2) *Draft TM 3: Results of Alternatives Analysis*

TASK 6 – PRELIMINARY EVALUATION OF POTENTIAL WATER SUPPLY AUGMENTATION PROJECT LOCATION

Recycled water, desalinated water, water conservation, groundwater recharge (e.g., percolation or injection of stormwater, recycled water, or surface water into the groundwater basin to augment groundwater supplies), and other options, may be appropriate supply alternatives for the Three Parties. However, the viability of such projects can be limited by significant physical constraints, depending on the specific type of project being considered. Therefore, based on the results of Task 5 and at based upon feedback from the Three Parties and at the direction of the Client, EKI will further evaluate the potential for implementation of one selected water supply augmentation project to be implemented on or adjacent to the former Fort Ord area. EKI will perform a high-level constraints analysis and evaluation of one potential project area based on key factors.

As part of this task, EKI will prepare a scope of work, which may include limited field work, to further assess the viability of the selected water supply augmentation project. The data collected may also inform the potential for projects at other areas on or near the former Fort Ord area. Because the level of effort to complete this work cannot be known at this time, we have included an assumed budget of $45,000 to prepare and implement the scope of work. EKI will attempt to develop a scope of work that is within the assumed budget, or if not feasible, to modify the budget to address the appropriate scope of work developed under this task. Client approval of the work plan and budget will be obtained prior to the completion of the work.

Task 6 Anticipated Deliverables:

1) *Workshop 4 to present and solicit feedback on the results the Preliminary Evaluation of Potential Water Supply Augmentation Projects*
2) *TM 4: Preliminary Evaluation of Potential Water Supply Augmentation Projects*

TASK 7 – STRATEGY RECOMMENDATIONS

With input from the Three Parties, EKI will evaluate the top three alternatives identified under Task 5, in terms of the program's operations, implementation, and service delivery capacity. The benefits and gaps for each will be identified and summarized. EKI will also develop a list of strategies and prioritizations for implementing each alternative. EKI will also identify opportunities to coordinate additional investigation and evaluations with work MCWD is doing for SGMA. Based on this assessment, EKI will recommend an approach to be presented to FORA, MCWD and MRWPCA Boards for input.

Task 7 Anticipated Deliverables:

1) *Workshop 5 to present and solicit feedback on Preferred Supply Augmentation Approach*
2) *Draft TM 5: Evaluation and Recommendation of a Preferred Supply Augmentation Approach*

TASK 8 – FINAL REPORTS

Following completion of Tasks 2 through 7, and at the direction of Three Parties, EKI will incorporate the draft TMs into a complete draft Water Augmentation Initial Alternatives report. The draft report will include a detailed strategic plan that outlines recommended next steps at a level of detail that will support agency planning, budgeting and Capital Improvement Program ("CIP") development. The draft report will also include additional relevant contextual information such as regional descriptions and project objectives, and will also document the outreach and coordination efforts included throughout the project.

The draft report will be summarized and presented to stakeholders in Workshop 6. EKI will incorporate feedback received from the Three Parties during Workshop 6 and based on review of the draft report into a Final Report.

Task 8 Anticipated Deliverables:

1) *Workshop 6 to present and solicit feedback on the Administrative Draft report*
2) *Administrative Draft Water Augmentation Initial Alternatives Report*
3) *Water Augmentation Initial Alternatives Report*

PROJECT SCHEDULE

We are prepared to begin work immediately on this project upon receipt of MCWD authorization to proceed. It is anticipated that this scope of work will take up to 12 months to complete.

PROJECT BUDGET

In as much as the exact level of effort to complete the Services cannot be identified at this time, we propose that compensation for consulting services by EKI be on a time and expense reimbursement basis in accordance with EKI's attached schedule of charges. On the basis of the Services described above, we propose a budget of $190,000 for completion of Tasks 1 through 8, which will not be exceeded without additional authorization. A breakdown of the estimated costs by task is presented below. This budget may be allocated among tasks as appropriate to meet project needs.

Task	Budget
Task 1 – Project Administration	$12,000
Task 2 – Background Survey: Water Supply Augmentation Program History and Current Status	$20,000
Task 3 – Economic Constraints and Strategy Assumptions	Not included[8]
Task 4 – Establish the Alternatives Analysis Ground Rules: Strategic Goals and Evaluation Criteria and Baseline and Water Supply Alternatives	$18,000
Task 5 – Water Supply Augmentation Alternatives Analysis	$57,000
Task 6 – Preliminary Evaluation of Potential Water Supply Augmentation Locations	$45,000
Task 7 – Strategy Recommendations	$12,000
Task 8 – Final Reports	$26,000
TOTAL	**$190,000**

As the services to be provided by EKI may evolve, EKI will inform Client if the existing budget is anticipated to need augmentation to accomplish requested work; such additional budgets will be established by mutually agreeable work authorizations.

If this proposal meets with your approval, we assume that this scope of work will be incorporated into an Agreement between Client and EKI.

We are pleased to have the opportunity to work with you on this project. Please call if you have any questions or wish to discuss this proposal in greater detail.

Very truly yours,

EKI ENVIRONMENT & WATER, INC.

Vera H. Nelson, P.E.
Vice President

[8] As discussed above under Task 3, assessment of potential funding sources and mechanisms is dependent on several significant factors, including the selected alternative, the funding opportunities available at the time of application, and the lead entity applying for such funding. While this is a critical step in the planning and implementation of the selected alternative, it will be more effective if it is conducted following the completion of this scope of work.

ATTACHMENTS

Attachment A – "Attachment A: Proposed Scope of Work," 23 January 2017 Request for Proposals – To Perform a Water Augmentation Alternatives Study

Attachment B – EKI Environment & Water, Inc. Statement of Qualifications

Attachment C – EKI Schedule of Charges dated 22 March 2018

eki environment & water

Attachment A

"Attachment A: Proposed Scope of Work", 23 January 2017 Request for Proposals – To Perform a Water Augmentation Alternatives Study

Fort Ord Reuse Authority
920 2nd Ave
Marina, CA 93933

January 23, 2017

REQUEST FOR PROPOSALS - TO PERFORM A WATER AUGMENTATION ALTERNATIVES STUDY.

Dear Consultant,

The Fort Ord Reuse Authority (FORA) is the managing agency in a three-party planning process (TPP) partnering with Marina Coast Water District (MCWD) and Monterey Regional Water Pollution Control Agency (MRWPCA) to identify water augmentation solutions from which the FORA Board may select and MCWD may implement.

FORA is requesting proposals from qualified individuals or firms to perform a Water Augmentation alternatives study to MCWD's Desalinization Project component of the Regional Urban Water Augmentation Project (RUWAP), and to recommend alternatives, including an 'all of the above' alternative, to meet the area's economic, energy usage, and environmental needs. Consultants may propose modifications to the scope, but must include rationale for doing so.

FORA's intent is to negotiate and enter into a Professional Services Contract with the most qualified firms providing the best value and who will use the necessary disciplines, and/or qualified sub-contractors/consultants, to accomplish the scope provided and required in **Attachment A** by FORA. The statement of qualifications (SOQ's) will be screened by a Selection Committee with the top 3 respondents invited to an oral interview or selected on the basis of the proposal only. Provided are selection criteria in **Attachment B**; and a sample contract is included in **Attachment C**.

FORA is accepting alternate technical considerations in addition to the requested proposals. Please provide FORA with alternate technical considerations to the proposed which may result in a better study at a lower cost.

Background

FORA was created by State legislation to oversee civilian reuse and redevelopment of the former Army base and remains the Department of Defense recognized local reuse authority for the former Fort Ord. It is FORA's responsibility to complete the planning, financing and implementation of reuse as described in the adopted 1997 Base Reuse Plan (BRP), including the Water Augmentation mitigations set forth therein. The 1998 FORA-MCWD Facilities Agreement assigns FORA responsibility to select a water augmentation solution, and MCWD responsibility to implement the chosen solution.

On June 10, 2005, the FORA and MCWD Board of Directors approved the RUWAP Hybrid Alternative, consisting of Recycled & Desalinization components providing 1,200 AFY each. FORA and MCWD then agreed upon a modified RUWAP Hybrid Alternative to provide 1,427 AFY of recycled water to the former

Fort Ord resulting in FORA Board Resolution No. 07-10 (May 2007), allocating 1,427 AFY of RUWAP recycled water to the land use jurisdictions. On October 9, 2015, the FORA Board of Directors endorsed a joint water supply planning process among FORA, MRWPCA, and MCWD to identify the "Additional Water Augmentation Component." On May 13, 2016, MCWD, MRWPCA and FORA agreed in a Memorandum of Understanding to fund one-third of initial consultant costs up to $50,000 for Fiscal Year 2016/17 and reimburse FORA as the managing party in identifying alternatives to supply the additional 973 AFY of Water Augmentation.

The Three Parties (FORA, MCWD, and MRWPCA) recognize there could be a mix of different solutions to meet the "Additional Water Augmentation Component." The purpose of this study is to identify what these options are.

Purpose

The estimated magnitude for the Scope of Work is between $100,000 and $150,000. It is estimated the work will take between six (6) and nine (9) months. FORA's cost limitations for the joint effort is $157,000. Specifically, FORA is seeking qualified individuals or firms to perform the scope of work provided in **Attachment A**, which includes:

- Review the historical, regulatory, statutory, and contractual framework pertaining to water policies in the region.
- Develop a work plan to include a re-assessment of the former Fort-Ord water needs, alternatives development, ground rules, metrics, alternatives analysis, report writing, and presentation.
- Perform alternatives analysis to include economic analysis, cost benefit analysis, decision-making analysis, and impact analysis.
- Prepare Technical Memo's (TM), Reports, Administrative Draft, Draft, and Final documents; and
- Attend meetings, coordinate, and communicate with staff.

SCHEDULE

Event	Dates
Qualified Vendor Notification and Request for Qualification	06/07/2017
Pre-Proposal Conference	06/15/2017
Deadline To Submit Questions & Clarifications	17:00pm PST 06/22/2017
Deadline to Submit Proposal	12:00pm PST 06/29/2017
Selection Committee Review of Proposals	07/10-07/14/2017
Interview Notification	07/15/2017
Interview Date	07/31-8/1/2017
Notice of Intent to Award	8/2/2017
Board Review & Vote	08/11/2017

STATEMENT OF QUALIFICATIONS

Submission and Delivery Instructions

Six (6) hard copies of the proposal shall be submitted to Peter Said, Project Manager, no later than 02/20/2017 at 12:00pm at Fort Ord Reuse Authority, 920 2nd Ave, Suite A, Marina, CA 93933. At least one copy shall be identified as "master copy" and shall contain original signatures. Proposers will submit one copy electronically on a CD, DVD, or flash drive to the above address. FORA reserves the

right to duplicate or disseminate for internal use any material provided. All submittals become the property of FORA and will be confidential until after a contract is executed. Each proposal shall be a maximum of fifteen (15) double-sided sheets. Appendices and references do not count towards the page limitation. The proposals shall include:

1. **Cover Letter.** Provide a one-page Executive Summary of the Proposal

2. **Narrative.** Provide a Narrative of the project, management, and technical approaches to be used over the course of the study. Please provide a brief description of the evidence based means/methods employed to identify problems/concerns/requirements, determine alternatives, analyze solutions, determine value, and draw conclusions. The Narrative should outline how the respondent will prevent cost over-runs, prevent schedule over-runs, and ensure quality of deliverables. Lastly, key assumptions shall be clearly identified as well as any exclusions or exceptions taken to the proposal.

3. **Costs.** Provide a fee schedule that includes each position/classification required to provide the services described in the scope of work, and all reimbursable fees and expenses. Provide the direct labor cost, fringe rate, overhead rate, and fee for each position/reimbursable.

4. **Schedule.** Respondent must submit a milestone matrix, PERT and Gantt chart identifying the deliverable dates to a sufficient level as to clearly show dependencies and how the work will be performed in a timely manner.

5. **Work Scope Critique.** FORA's intent is to identify and compare feasible, economic, technical solutions which will provide the former Fort Ord with augmented water. Respondents are encouraged to submit alternate technical proposals and present alternate solutions/opportunities. Further, respondents have the opportunity to list these additional scope elements as options in the attachments. FORA suggests options/alternate proposals be detailed separately from the proposed scope of work. Alternate proposals should be accompanied by a narrative explaining the need and providing a comparison with the proposed scope. Please review the sample contract and address any concerns so they may be dealt with early in the process.

6. **Cost Proposal.** Provide a cost proposal for the proposed scope of work and alternate proposals/considerations in a separately sealed envelope. Provide an itemized cost summary per deliverable including subtotals of hours and charges attributable to each deliverable, as well as a project grand total on a fixed fee, not-to exceed time and materials basis.

7. **Statement of Qualifications (SOQ).** The SOQ must be submitted in the format identified below. The SOQ must be indexed and bound separate from the proposal. Please note that the maximum number of pages allowed under each section as stated below; also, please make sure the font size is no smaller than 'Arial' 11 point.

   A. QUALIFICATIONS
   This section should provide a description of the firm's professional qualifications and licensing/certification of key personnel & sub consultants. Specifically provide:

   - The name and title of key staff members assigned to manage or otherwise play a major role(s) in this project.
   - Include their resumes and copies of all certifications.

- Identify key staff member's assigned role and responsibilities.
- Qualifications of any sub-consultants proposed on this project; clearly explain their role and the percentage of involvement.

B. EXPERIENCE

A minimum of five (5) years of professional experience under the same company name and license required. Less than 5 years will be grounds for disqualification.

- List three (3) successfully completed public agency projects in California within the last five (5) years and with a minimum contract value of $80,000.
- List at least two (2) projects successfully completed for a county or jurisdiction on the California Coast (San Diego, Orange County, Los Angeles, Ventura, Santa Barbara, San Luis Obispo, Monterey, Santa Cruz, San Mateo, San Francisco, Marin, etc.).
- Successful experience working with three (3) or more jurisdictions and agencies on the same project.

C. REFERENCES

Provide four (4) references from previous projects of similar scope and delivery method. Please provide project descriptions and current contact information for the Project Manager and Owner of each project. Please include verifiable project metrics and websites if possible. All references and projects will be verified, if contact information is not current, then provided project will not be evaluated as part of the scoring. Each project described above should provide current information for the following:

- Value of the contract and indicate if your firm was a subcontractor.
- Start date & completion date.
- Was the contract completed on time? If no, provide explanation.

D. ORGANIZATIONAL CAPABILITY

This section should demonstrate an understanding of the requirements of the project, the firm's ability to meet them and the firm's commitment of resources to achieve them.

E. PROJECT BUDGETING & SCHEDULING HISTORY

Provide evidence of the firm's history of meeting or beating established budgets, cost control processes, quality control processes, and include strategies to prevent change orders to scope.

F. ORGANIZATIONAL CHART

Include an organizational chart showing, at a minimum, the key personnel assigned to the study and their reporting relationship within the organization. Include consultants proposed to be used, their education/experience/certifications and describe their role (Copies of certifications to be included are in addition to the 1 page requirement.)

G. ORGANIZATIONAL PRIORITIES

Explain the organizations programs/projects/contracts which run concurrently or in parallel with the proposed schedule. Identify key personnel and their time commitments. It is preferred, but

is not mandatory, that respondents provide a statement to the effect of, "if awarded, the FORA contract will take precedence over other obligations."

Evaluation Process

FORA staff will determine responsiveness and evaluate all proposal submittals. Please review the evaluation criteria (**Attachment B**). The evaluation process will consider all required information. Each criterion will be scored based upon a pre-determined point system. Interviews with the highest ranking teams may be scheduled at the sole discretion of FORA staff. The Selection Committee will be made up of staff members from FORA, MCWD, and MRWPCA.

Please contact Peter Said if you have any questions about this Request for Proposal.

Sincerely,

Peter Said
Project Manager
peter@fora.org
(831) 883-3672

1. **Attachment A: Scope of Work**
2. **Attachment B: Selection Criteria & General Provisions**
3. **Attachment C: Sample Contract**
4. **Attachment D: Cost Basis Template**

ATTACHMENT A: PROPOSED WORK SCOPE

1. PROJECT ADMINISTRATION

a. Project Management.
This work package includes all project management and communication activities required by the consultant to perform the study, including but not limited to:
- Kickoff Meeting
- Meeting minutes
- Monthly progress reports to Fort Ord Reuse Authority (FORA) staff
- Tracking project budgets and schedules
- Coordination with FORA Staff

b. Meetings & Travel
Up to eighty (80) hours for various meetings including Technical Advisory Committee (TAC), Administrative Committee, and Board Meetings.

c. Technical Review – Quality Assurance/Control.
Utilize an internal review process prior to control and release of all deliverables such that no (0-10) mistakes in grammar, punctuation or content are found. Utilize a version control system to ensure consistency across all documents.

d. Regular Progress Reporting.
Provide monthly reports including but not limited to:
- Actions completed
- Current status
- Updated schedule
- Updated budget (printed copy and in excel) % complete, remaining
- Proposed action plans, etc…

Anticipated Deliverables:
1.1 Monthly reports.
1.2 Agendas & Minutes of meetings as needed.
1.3 Meetings – Up to eighty (80) hours.

2. BACKGROUND SURVEY

a. Records Compilation & Database development.
Numerous water feasibility studies, water supply assessments, alternative studies, and technical reports have been completed within Monterey County. To prevent re-doing work completed in previous studies, and to benefit from the valuable data collection and analysis already completed, FORA, MCWD, & MRWPCA will work collaboratively with the consultant to obtain all available studies during the data & records compilation phase.

Review previously completed water source, supply and augmentation studies including feasibility, conservation and water demand studies from Santa Cruz County and San Luis Obispo County. Compile a list of previously studied alternatives. Review existing policy framework and identify state and county laws and policies that guide water augmentation planning in Monterey County. Develop an electronic database of available resources, pertinent policies, and information identified while performing the background survey. The database must include a bibliography and previously completed: feasibility studies; technical reports; recycled water ordinances; etc. The database should include a .pdf of each study/report and a hyperlink to the location found.

Quality assurance/quality control (QA/QC) of the data shall be conducted for any duplicate records and general checking of the data from various sources for uniform formats, parameters, and spatial information. The summary of the available data, identified data gaps, and associated data management systems will be incorporated into the Final Report.

b. Review the developments that led to this Analysis.
Investigate prior relevant analyses and reference the applicable document(s). Identify gaps to be addressed in this study. Prepare Background Survey Summaries. The summaries will be incorporated into the Final Report.

i. Summarize the basis for FORA Base Reuse Plan (BRP) Water Augmentation mitigation.
Review the BRP, the U.S. Army's 1993 Environmental Impact Statement (EIS), the BRP Environmental Impact Report (EIR), the Public Facilities Implementation Plan (PFIP), and associated documents. Clearly identify the basis for the Water Augmentation program and identify as many of the assumptions used to determine the various mitigation amounts and demand.

ii. Summarize Water Supply and Demand for the former Fort Ord area.

Studies have been performed by different jurisdictions. The BRP established mitigation requirements and water demand for the Former Fort Ord area. Review BRP assumptions, historical and current development forecasts and compare the information to completed studies.

iii. Summarize the RUWAP background.
The Regional Urban Water Augmentation Project (RUWAP) approved by the FORA board in 2005, was a hybrid project of Recycled Water and Desalinization. This Analysis intends to study the water supply options to the desalinization portion of the RUWAP. Review the RUWAP history and summarize the political environment, assumptions, constraints, risks, issues, and opportunities with the project.

c. Jurisdictional Summary and Analysis.
Provide GIS map of all agencies/district's service area boundaries and facilities. Develop a summary list of the jurisdictions and agencies, their rights, responsibilities, and expected roles in the context of the RUWAP and the former Fort Ord Area. Provide one PDF map per jurisdiction/agency. Provide one PDF composite map of all jurisdiction/agencies. Provide maps in a vector format and in a .dxf file.

Anticipated Deliverables:

2.1 *Database of available resources, pertinent policies, and information identified while performing the background survey. (in Excel or web based application)*

2.2 *Technical memorandum (TM) summarizing the regulatory action triggering the need for an analysis.*

2.3 *TM explaining the basis for the FORA's BRP Water Augmentation mitigation, the original analysis & its underlying assumptions, and the BRP forecast demand reassessment.*

2.4 *Jurisdictional Summaries and Analysis.*

3. ECONOMIC CONSTRAINTS AND STRATEGY ASSUMPTIONS

a. Identify Public Funding and Financing Options
Provide a concise summary of public funding and financing sources applicable for water augmentation options/alternatives that include the: issuing agency(ies); rates and terms; application requirements; applicability; timelines for application and award; and other relevant considerations. The information will be incorporated into the Final Report.

b. Identify Funding Mechanisms and Rate Structure Options

i. Review/interview peer agency revenue mechanisms and rate structures.

ii. Summarize and prioritize potential revenue mechanisms and their constraints. Provide a summary for each water augmentation option/alternative, for the 'FORA selected Top 3', and the preferred recommendation. Summarize implementation considerations & requirements. Outline pros and cons. Summarize cost allocations.

iii. Compare revenue mechanisms, constraints, and rate structures to peer agencies & similar structures.

Anticipated Deliverables:

3.1 TM identifying Public Funding, Mechanisms, and Rate Structure Options.
3.2 TM summarizing impacts and benefits to stakeholders.
3.3 TM describing possible economic strategies for implementing alternative water augmentations projects for the primary stakeholders.

4. ESTABLISH THE ALTERNATIVES ANALYSIS GROUND RULES

a. Summarize targets against which the alternatives will be assessed.
Identify the thirty (30) year strategic goals of Water Augmentation Program for the former Fort Ord. Identify target time horizon for implementation, establish time bound objectives, key milestones and regulatory constraints. Identify Key Challenges, risks, issues and opportunities.

b. Establish a Baseline.
Identify the baseline. Identify one (1) alternative as a baseline. Assess the baseline against the target goals and objectives. Develop at least three (3) viable alternatives to be compared against the target goals and the baseline. Water conservation must be included as one of the alternatives. An alternative may be a mix of options. Define the critical questions; list assumptions and constraints. Define criteria for viable/non-viable; identify representative solutions (systems/programs); and develop operational scenarios to use for comparisons/evaluation.

c. Develop Measures and Evaluation Criteria.
Work with FORA staff and come to consensus on evaluation criteria by which alternatives will be assessed. Develop weighting and measures for, but not limited to, the following criteria: Cost Effectiveness; Value; Ability to

Engage with Other Alternatives; Ability to Engage with Existing Systems; Percentage of Solution Contribution Economic Feasibility; Implementation Feasibility; Energy Usage; Environmental Acceptance; Ease of Risk Mitigation; Maintainability; and Time to Implement. Attention should be given to the economic and energy impacts of global climate change (seawater rise, aquifer impacts), and changes due to geography (erosion, gravity, inland locations etc.).

Anticipated Deliverables:

4.1 TM summarizing thirty (30) year strategic goals, milestones and key Challenges (Risks), Issues and Opportunities.
4.2 TM defining the evaluation criteria.
4.3 Evaluation criteria and weightings matrix. (in Excel)

5. WATER AUGMENTATION AND ALTERNATIVES ANALYSIS

The analysis of alternatives should be sufficiently detailed and rigorous to permit independent comparative evaluation of the benefits, costs, and environmental risks of the baseline and each reasonable alternative. An alternative may consist of a 'portfolio of alternatives' or a mix of solutions.

a. Study and identify whether more or less than 1,427 AFY of advance treated water is needed to serve the Ord Community.

   i. Reassess the demand basis for 2,400 AFY of recycled water.
   Review the BRP Appendix B (Volume 3), PFIP figure 2-7 and the assumptions used to determine the need for 2,400 AFY. Reassess the demand forecast for recycled water given, but not limited to, the jurisdictional general plans, the long-term strategic goals, and the land use jurisdictions development forecasts over a thirty (30) year horizon.

b. Identify the Technical Requirements for each Alternative.

   Determine the technical requirements, design and regulatory constraints for each alternative. Identify the impacts on the technical requirements on the economics and feasibility of the alternative.

c. Perform a Feasibility Analysis for each Alternative.
   Perform a cost/benefit analysis for each alternative. Perform a preliminary review to determine whether the selected Alternatives are technically, financially, and operationally viable within the regulatory constraints. Determine the feasibility of implementing each alternative.

d. Perform a Cost/Benefit Analysis for each Alternative.

Determine the economics of each option, the potential scope, cost to implement and direct/indirect costs of operation.

Describe the planned approach for addressing the fully burdened cost to implement. Describe the approach to the life-cycle cost (or total ownership cost). Estimate in constant dollars, adjust for discounting (time value of money) and account for the distribution of the costs over 30 years. The cost estimates should account for any life cycle costs associated with capital assets that have remaining useful value at the end of the period of analysis. Perform a sensitivity analysis for the critical assumptions and identify the upper and lower cost bounds (or probabilistic distribution) for each alternative.

Identify the impact and benefits for each jurisdiction/agency/district. For each identified beneficiary, characterize the realized benefit(s) that would accrue because of FORA's Water Augmentation program. This summary should be qualitative in nature. The identified impacts and benefits will be incorporated into the Final Report.

e. Perform Effectiveness Analysis for each Alternative.
Summarize the analytic approach to the analysis. Address sensitivity analyses in the overall effectiveness analysis. Typically, there are a few critical assumptions that often drive the results of the analysis, and it is important to understand and point out how variations in these assumptions affect the results. In such cases, the effectiveness analysis should describe how sensitive the outcomes are to the assumed performance estimates.

f. Perform Cost vs. Effectiveness Comparative Analysis.
Compare Alternative Costs to Alternative Effectiveness. Reduce analysis down to a simple chart.

Anticipated Deliverables:

5.1 TM that summarizes the reasoning for selecting the Proposed Alternatives.
5.2 TM that summarizes the Technical Requirements of each Alternative
5.3 TM that summarizes the Feasibility and Cost/Benefit Analysis for each alternative.
5.4 TM that summarizes the Effectiveness Analysis.
5.5 TM that summarizes the Cost Effectiveness Comparative Analysis.
5.6 Excel File with all forecast demand data, cost analysis assumptions and equations, effectiveness criteria/weighting calculations, and comparative analysis.

6. STRATEGY RECOMMENDATIONS

a. Evaluate the Top 3 Alternatives.
Evaluate the Top 3 Alternatives in terms of the program's operations, implementation, and service delivery capacity. Identify benefits and gaps for each. Develop a list of strategies and prioritizations for implementing each alternative.

b. Recommend a Preferred Alternative.
Identify and recommend an approach to be presented to FORA, MCWD and MRWPCA Boards for input.

Anticipated Deliverables:

6.1 Detailed Evaluation of the Top 3 Alternatives including deficiency analysis.
6.2 TM summarizing Evaluation and Recommendation of a Preferred Augmentation Approach.

7. FINAL REPORTS

a. Incorporate Technical Memos into Final Water Augmentation Initial Alternatives Report.
Upon Notice of Board Consensus, and in coordination with MCWD, incorporate the TM's and relevant information including, but not limited to, regional descriptions, objectives, stakeholder outreach and coordination into a final report. Expect to support incorporation through final release.

b. Develop a draft implementation strategy from which others may prepare a CIP development plan.
Prepare water augmentation strategy for the former Fort Ord area based on the recommended water augmentation approach. The strategy should be sufficient for the development of a Project Phasing approach to draft a CIP development plan by others.

Anticipated Deliverables:

7.1 TM proposing an implementation strategy sufficient for another entity to develop Capital Improvement Project plans.
7.2 Water Augmentation Report Incorporation Administrative Draft.
7.3 Water Augmentation Report Incorporation Draft.
7.4 Water Augmentation Report Incorporation Final Release.

DELIVERABLES LIST (SUMMARIZED)

1. PROJECT ADMINISTRATION

1.1. Monthly reports.
1.2. Agendas & Minutes of meetings as needed.
1.3. Meetings - up to 80 hours

2. BACKGROUND SURVEY

2.1. *Database of available resources, pertinent policies, and information identified while performing the background survey. (in Excel or web based application)*
2.2. *Technical memorandum (TM) summarizing the regulatory action.*
2.3. *TM explaining the basis for the FORA's BRP Water Augmentation mitigation*
2.4. *Jurisdictional Summaries and Analysis.*

3. ECONOMIC CONSTRAINTS AND STRATEGY ASSUMPTIONS

3.1. TM identifying Public Funding, Mechanisms, and Rate Structure Options.
3.2. TM summarizing impacts and benefits to stakeholders.
3.3. TM describing possible economic strategies for implementing alternative water augmentations projects for the primary stakeholders.

4. ESTABLISH THE ALTERNATIVES ANALYSIS GROUND RULES

4.1. TM summarizing thirty (30) year strategic goals, milestones and key Challenges (Risks), Issues and Opportunities.
4.2. TM defining the evaluation criteria.
4.3. Evaluation criteria and weightings matrix. (in Excel)

5. WATER AUGMENTATION AND ALTERNATIVES ANALYSIS

5.1. TM that summarizes the reasoning for selecting the Proposed Alternatives.
5.2. TM that summarizes the Technical Requirements of each Alternative
5.3. TM that summarizes the Feasibility and Cost/Benefit Analysis for each alternative.
5.4. TM that summarizes the Effectiveness Analysis.
5.5. TM that summarizes the Cost Effectiveness Comparative Analysis.
5.6. Excel File with all forecast demand data, cost analysis assumptions and equations, effectiveness criteria/weighting calculations, and comparative analysis.

6. STRATEGY RECOMMENDATIONS

6.1. *Detailed Evaluation of the Top 3 Alternatives including deficiency analysis.*
6.2. *TM summarizing Evaluation and Recommendation of a Preferred Augmentation Approach.*

7. FINAL REPORTS

7.1. TM proposing an implementation strategy sufficient for another entity to develop Capital Improvement Project plans.
7.2. *Water Augmentation Report Incorporation Administrative Draft.*
7.3. *Water Augmentation Report Incorporation Draft.*
7.4. *Water Augmentation Report Incorporation Final Release.*

Reference Material:
Click + Control to follow the hyperlink:

Fort Ord Reuse Authority (FORA)

1. FORA Database of Governing Documents
2. FORA Base Reuse Plan
3. FORA Public Facilities Implementation Plan (PFIP) See PFIP Section 3

Marina Coast Water District (MCWD)

1. MCWD Engineering Documents
2. MCWD 2015 Urban Water Management Plan
3. MCWD 2004 Ord-Community Water Distribution Master Plan

Attachment B

EKI Environment & Water, Inc. Statement of Qualifications

EKI Environment & Water, Inc.

FIRM HISTORY

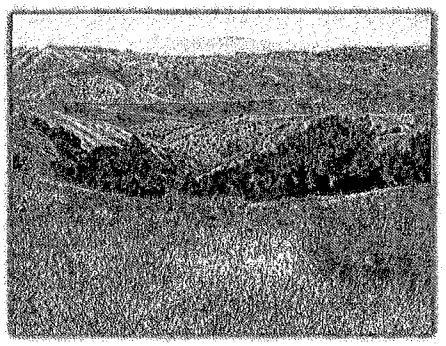
EKI Environment & Water, Inc. (EKI, formerly known as Erler & Kalinowski, Inc.) is an employee-owned company that has provided comprehensive environmental engineering and water resources services throughout California and the United States for a broad range of companies and government agencies since it was founded in 1989. Our firm of over 55 employees includes engineers, geologists, hydrogeologists, environmental scientists, computer-aided designers, geographic information system (GIS) database specialists, and administrative personnel in five offices located in Northern and Southern California and Colorado.

COMPANY PHILOSOPHY

Our firm's goal is to successfully resolve our clients' challenges to accomplish their objectives, on time and within budget. We feel this objective demands a solution-oriented approach to projects, ongoing client communication, and an established credibility with regulatory agencies. The size of our firm and the high level of experience and continuity of our staff permit a service-focused technical approach to projects with quality control of each project by senior managers.

We have provided quality engineering services to many clients since the founding of our firm 28 years ago.

WATER RESOURCES EXPERIENCE



EKI has extensive experience in water and wastewater planning, water supply portfolio analysis and development, hydraulic modeling, utility program management, and hydrogeologic investigations for numerous municipalities, developers, and agencies. Our experience in a variety of roles provides EKI with a valuable perspective on Water Supply Assessment (WSA) and water planning projects. EKI has conducted WSAs for major development projects and General Plan amendments throughout the San Francisco Bay Area and prepared numerous Urban Water Management Plans (UWMPs) for Bay Area water retail agencies, which are often serve as the foundation for WSAs. Specifically, EKI's experience water supply planning includes the preparation of WSAs and/or UWMPs for the cities of East Palo Alto, Burlingame, Redwood City, Foster City, Menlo Park, Tracy, Santa Cruz, Mountain View, and Valley of the Moon and Westborough Water Districts. EKI has worked extensively with the City of Burlingame's Public Works Department for over a decade on projects including serving as the Program Manager for Burlingame's water system Capital Improvements Program (CIP) and storm drain CIP, preparing the Water System Master Plan for the Burlingame's potable water distribution system, and many others.

Water resource planning is becoming increasingly important as the demand for water intensifies. EKI has prepared water master plans, water supply master plans, water supply assessments, urban water management plans, water shortage contingency plans, and water conservation plans to help clients manage their water demand and supply. EKI has experience developing defensible water demand estimates for proposed new developments that accurately reflect the proposed land plan and the level of water efficiency that is anticipated as part of the development project. EKI has also supported parties in groundwater basin adjudications, served as the technical expert for multi-party groundwater mediation proceedings, and is supporting entities to comply with the Sustainable Groundwater Management Act (SGMA). EKI has examined the conjunctive uses of surface water, groundwater, and recycled water, conducted potable water

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supply assessments, and provided water rights support including the use of numerical modeling and data analysis to determine historical water use, basin safe yield, and extracted water quality. EKI has forecasted water demands and evaluated conservation measures and water reuse opportunities to assist clients in reducing their potable water demands.

EKI brings our broad and extensive water resources planning, engineering, and hydrogeology experience to bear in water resources planning projects and WSA analyses. Typical water resources services provided by EKI include:

- ✓ Water resource planning, including Water Supply Assessments (WSAs), Urban Water Management Plans (UWMPs), Water Shortage Contingency Plans (WSCPs), and Water Master Plans;
- ✓ Strategic and technical support for Sustainable Groundwater Management Act (SGMA) compliance;
- ✓ Assessment and development of groundwater supplies, including basin safe yield assessments, aquifer testing, groundwater quality assessments, and groundwater modeling;
- ✓ Water supply system planning, design, and construction management;
- ✓ Water supply portfolio development and management, including water transfers and aquifer storage and recovery (ASR) projects;
- ✓ Advanced water treatment, including desalination and water reuse applications;
- ✓ Technical expert support for basin adjudication proceedings and litigation services;
- ✓ Design, construction, and testing of large-capacity water supply wells, including municipal supply wells;
- ✓ Evaluation of managed aquifer recharge, including with recycled water for direct or indirect potable reuse (IPR/DPR) purposes; and
- ✓ Local and state regulatory and permit support.

MANAGEMENT PHILOSOPHY

EKI has developed a reputation for effective technical program management by carefully assessing client needs, providing appropriate services led by experienced staff, and delivering products that fulfill client expectations.

At EKI, we understand that the successful completion of a project is not so much the result of the "company" as it is the performance of key individuals. We are aware of the importance our clients place on the selection of a capable Project Manager supported by technical specialists to effectively guide their project to completion. Our project managers form one-on-one relationships with clients and work hard to understand each project's technical, financial, and regulatory constraints. Communication within EKI is facilitated by the proximity of all project team members and by frequent team meetings in each office. Each project manager is supported by an officer of the firm.

IT'S IN THE MIX

EKI's staff comprises an effective mix of disciplines, including environmental engineers, civil engineers, chemical engineers, chemists, geologists, hydrologists, and environmental scientists. This complementary mix is an asset to understanding and effectively resolving a wide variety of complex technical challenges.

CLIENT LOYALTY

EKI takes pride in repeat business from satisfied clients. Over 90 percent of our work is through referrals or repeat work with existing clients. The low turnover of our staff permits the development of long-term working relationships with our clients and each other. Our project management team offers continuity and tenacious attention to responsiveness and quality service.

Over 90 percent of EKI's work is acquired through referrals or repeat work with existing clients.

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SELECTED RELEVANT PROJECT EXPERIENCE

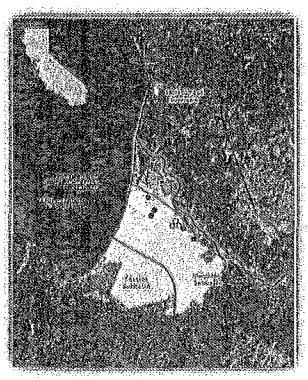
Marina Coast Water District – Groundwater Augmentation and Groundwater Model Review

Key Project Elements

- Development of Hydrogeologic Conceptual Model
- Groundwater Augmentation Feasibility Study (IPR/DPR)
- Groundwater Basin Impact Assessment from Proposed Cal Am Slant Well Withdrawals
- Detailed groundwater modeling review
- EIR/EIS public comment preparation identifying modeling deficiencies and basin impacts

Date of Services: 2016 to present

Client Contact: Keith Van Der Maaten, General Manager, (831) 883-5925



- Performed feasibility study evaluating technical viability of groundwater augmentation through percolation and/or injection of Salinas River winter storm flows and/or tertiary treated wastewater.
- Performed analytical groundwater modeling and evaluated use of unconfined aquifer for storage and intermittent river storm flows to limit size of surface water treatment facilities.
- Assessed impacts of proposal Cal/Am groundwater intake system on basins that underlie MCWD's service area.
- Performed detailed review of numerical MODFLOW groundwater model presented in Cal/Am draft EIR/EIS.
- Prepared public comments on draft EIR/EIS outlining groundwater model deficiencies and providing recommendations for additional characterization and model modification to better reflect project impacts on groundwater basin underlying MCWD's service area.
- Recently selected to support SGMA compliance and GSP development. We are also preparing the Proposition 1 grant funding application.

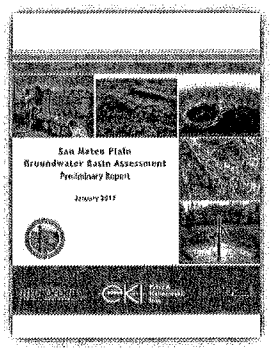
County of San Mateo – Groundwater Basin Assessment

Key Project Elements

- Strategic and technical consulting on potential implications of SGMA on County groundwater basins
- Development of conceptual and numerical models
- Assessment of management options
- Stakeholder outreach
- Download San Mateo Plain Subbasin Phase I Report: http://www.smcsustainability.org/download/energy-water/groundwater/Final-Phase-1-Report.pdf

Date of Services: April 2016 - present

Client Contact: Charles Ice, San Mateo County Environmental Health, (650) 399-6911



- EKI provides San Mateo County, which spans from the Pacific Coast to the San Francisco Bay, with strategic and technical support to regarding the implications of SGMA for its groundwater basins.
- EKI is leading a team to develop the first-ever comprehensive groundwater basin assessment for the San Mateo Plain Groundwater Subbasin. This effort will establish a comprehensive understanding of the basin and assist the basin with future management and compliance with SGMA.
- Phase 1, completed in January 2017, included rigorous technical modeling and analysis, including compilation of disparate data sources into a single basin database, development of a hydrogeologic conceptual model, refinement and evolution of a regional numerical groundwater model, a detailed assessment of potential threats to groundwater, the development of a comprehensive basin water balance, and identificaition of potential basin management strategies. Phases 2 and 3 of the proejct are ongoing.
- The project includes a strong public outreach and engagement component, which has included 7 stakeholder workshops lead by EKI, to date.

City of Santa Cruz – Stormwater Compliance at the City Landfill and Resource Recovery Facility

Key Project Elements

- Evaluated potential surface infiltration options for stormwater
- Performed hydrological analyses of stormwater runoff at the Facility to establish drainage networks and points of discharge
- Performed Level 1 ERA Evaluation and prepared Level 1 ERA Report and Level 2 ERA Action Plan
- Addressed 40 CFR Subchapter N Landfill requirements

Date of Services: 2017 to present
Client Contact: Scott Glucs, P.E., City of Santa Cruz
(831) 420-5288

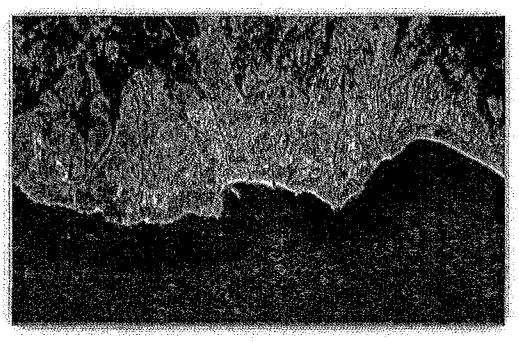
- Assisted the City's landfill facility (Facility), located at 605 Dimeo Lane in Santa Cruz, with compliance under California's Industrial General Permit for Storm Water Discharges Associated with Industrial Activities.
- Conducted hydrological analyses to establish facility drainage areas and discharge locations for the purposes of installing stormwater runoff controls.
- Evaluated the feasibility of infiltrating a minimum of 85% of stormwater runoff from the facility to meet anticipated alternative compliance methods to be included in the State Water Board amendments to the Industrial General Permit.
- Performed a hydrological analysis to identify and characterize the stormwater runoff from portions of the landfill considered to be "contaminated stormwater" per 40 CFR Part 445 (Landfill Point Source Subcategory) and for which effluent limitations established in 40 CFR 445.21 could be applicable. Based on this, developed a plan to redirect runoff from the active portions of the landfill so that such runoff would not the facility would not be subject to effluent limitations.
- Prepared Level 1 Exceedance Response Action (ERA) Report and Level 2 ERA Action Plan for a number of pollutants in stormwater.
- Conducted landfill-wide sampling and analysis to determine potential pollutant sources and develop remedies to reduce concentrations in stormwater runoff.

City of Santa Cruz – Water Supply Assessments

Key Project Elements

- Prepared water supply assessments to support an expansion of the City's Sphere of Influence and General Plan Updated
- Evaluation and projection of water demand and supplies
- Evaluation of water supply source reliability and sufficiency to meet projected additional water demands

Date of Services: 2009-2011
Client Contact: Toby Goddard, City of Santa Cruz
(831) 420-5232



- EKI has prepared two SB 610-compliant Water Supply Assessments (WSAs) for the City of Santa Cruz. Both projects were highly controversial and have received significant scrutiny and opposition by portions of the community.
- In 2009, EKI prepared a WSA to support the City of Santa Cruz's Sphere of Influence (SOI) Amendment Project to support the expansion of the City's SOI to accommodate a 374-acre planned development within the University of California at Santa Cruz (UCSC) campus. The WSA evaluated the availability of the City's water supply sources to meet the demands of the University's LRDP in addition to the City's existing and planned water uses, during normal and dry years over a 20-year horizon.
- In 2011, EKI prepared a WSA to support the update of the City's General Plan. While the necessity to prepare a WSA for a general plan update is subject to legal interpretation, the City of Santa Cruz chose to prepare one voluntarily to serve as a long-term planning tool and to support the General Plan process. Water demands for the City's planning area and greater water service area were evaluated against the availability and anticipated reliability of the City's diverse water supply sources, which include groundwater, surface water diversions, and a surface water reservoir.
- Both WSAs were unanimously approved by the City Council.

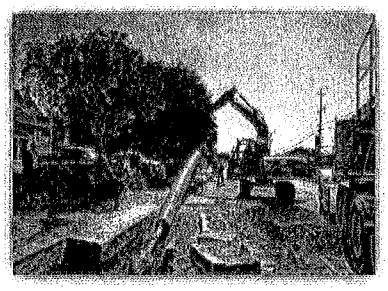
Coastside County Water District (CCWD) in Half Moon Bay

Key Project Elements

- Replacement of complex potable water transmission main spanning Pilarcitos Creek
- Evaluation of alternatives
- Design and construction management services
- Assistance with securing necessary easements and environmental permits

Date of Services: June 2014 – July 2016

Client Contact: David Dickson, General Manager, 650-726-4405, ddickson@coastidewater.org



- CCWD's primary potable water transmission main connecting to the southern half of their service area included a section of 10-inch, 1940's era welded steel pipe attached to the historic Main Street Bridge, which spans Pilarcitos Creek.
- EKI evaluated multiple alternatives to replace the pipe including a variety of trenchless technologies to cross a new pipe under the creek and pipe bridge alternatives to cross over the creek and ultimately selected installing the new pipe under Pilarcitos Creek using horizontal direction drilling (HDD).
- Provided design services for replacement of existing 10-inch water main with acombination of high density polyethylene water pipeline installed by HDD, ductile iron pipeline installed using open trench methods, and replacement of 11 service connections.
- Prepared all technical design documents including opinions of probable cost, specifications, and drawings.
- Provided assistance with securing easements from private property owners, secured environmental permits, and provided support during the bidding process.
- Provided construction management services including engineering services during construction, inspection, public outreach, project administration, dispute resolution, and change order negotiations.
- Project completed within budget and time constraints.

City of East Palo Alto – Water Supply Strategy Implementation

Key Project Elements

- Strategic water portfolio development and funding
- Supported first-ever transfer on the Hetch Hetchy water system
- Development of groundwater as a new supply source
- Permitting & well/treatment system design and construction
- Stakeholder outreach

Date of Services: 2014 to present

Client Contact: Kamal Fallaha, Director of Public Works, (650) 853-3117

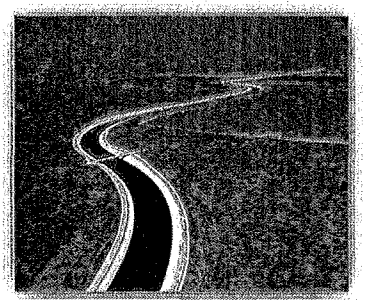
- Developing and implementing the City's comprehensive water strategy to address the water shortage crisis within the City, including support and implementation of the moratorium, water demand offset program and water allocation policy, and execution of the first-ever water transfer on the Hetch-Hetchy Regional Water System.
- Providing technical, design, and permitting support services to the City as part of the implementation of the City's groundwater development projects, including rehabilitation of an existing well an construction of a new well.
- Conducted a hydrogeologic investigation in support of the Pad D well design, including test well design and construction, aquifer testing, water quality sampling, groundwater modeling, preliminary design and cost estimation, and CEQA support.
- Assisted the City in securing $3.0 million dollars in Proposition 84 grant funding to support the City in its conjunctive groundwater use and management efforts. The grant application that EKI prepared for the City resulted in it being the top ranked project from the 9-County Bay Area Region.

Water Supply Evaluation for the Saltworks Development Project

Key Project Elements

- Performed a Water Supply Assessment as part of the entitlements for the large development
- Projected potable water demand and evaluated water supply, transport, and treatment options
- Worked with developer and counsel to secure highly-reliable surface water rights for the Project and to identify potential transfer opportunities

Client Contact: Eric Robinson, Kronick Moskovitz Tiedemann & Girard, (916) 321-4500



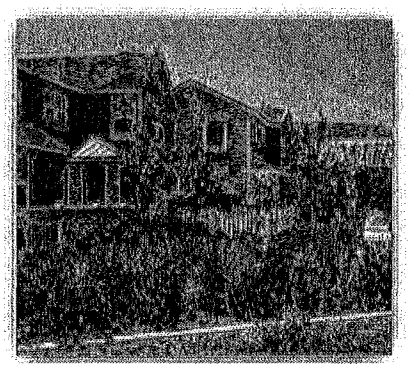
- Performed a Water Supply Assessment (WSA) as part of the entitlements process for a large, master-planned community in Redwood City.
- Projected potable water demand and evaluated water supply, transport, and treatment options. Water demands were based on aggressive water conservation assumptions and incorporation of greywater and rainwater systems, in addition to use of recycled water.
- Worked closely with developer and legal counsel to secure highly-reliable surface water rights for the project and to identify potential transfer opportunities. Identified potential water resources for the development, including desalination, recycled water, and local Bayside groundwater resources.
- Preliminarily investigated groundwater extraction opportunities within the City's water service area, analyzed aquifer testing data to estimate local aquifer characteristics, developed a basin water balance to estimate sustainable yield, performed preliminary saltwater intrusion and subsidence evaluations, and recommended supply well locations and capacities.
- Produced preliminary design and estimates of probable cost for identified water and wastewater treatment and supply options.

Water Supply Assessment for New Community in Central California

Key Project Elements

- Performed a Water Supply Assessment as part of the entitlements for the large development
- Projected potable water demand and evaluated water supply, transport, and treatment options; identified potential water resources, including the transfer of additional surface water to the local water district
- Quantified historical groundwater use to establish overlying rights
- Constructed a high-yield production well

Client Contact: Mark Kheke, President, DMB Pacific Ventures, (949) 955-0984



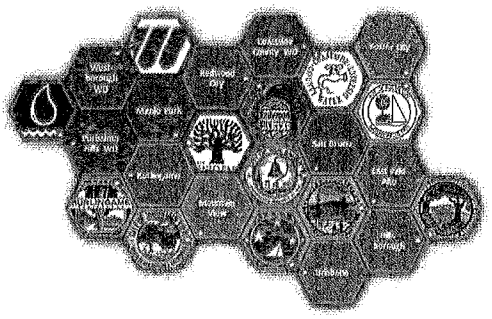
- Prepared a WSA as part of the entitlements process for a large, master-planned community in an agricultural area of California.
- Projected potable water demand and evaluated water supply, transport, and treatment options; identified potential water resources, including the transfer of additional surface water to the local water district through the Central Valley Project system and development of local groundwater.
- Quantified historical groundwater use to establish overlying rights; coordinated well rehabilitation and construction; performed aquifer pump testing to estimate long-term well yield; mapped historic water levels in multiple aquifers beneath the site; developed a conceptual hydrogeologic model; conducted peer reviews of existing groundwater basin models; and led water quality analyses.
- Constructed a high-yield production well capable of serving community needs.
- Prepared preliminary designs and costs estimates for new potable and wastewater treatment facilities, featuring reverse osmosis to produce tertiary-treated recycled water.
- Aided discussions with local water district and other stakeholders regarding water supply options.

Urban Water Management Plans for Multiple Water Agencies

Key Project Elements

- Assessed availability and reliability of groundwater, surface water supplies; and recycled water supplies Estimated existing and future water demands based upon land use documents
- Assessed potential reductions in per capita water use based on selected conservation measures
- Supported city and agency staff in council and stakeholder meetings

Date of Services: various during 2005, 2010, and 2015 UWMP cycles
Client Contact: multiple, available on request



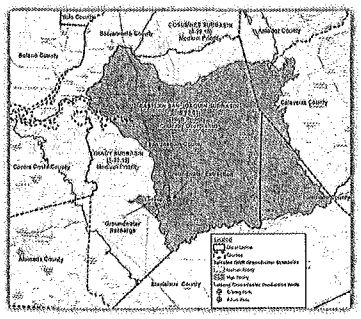
- EKI has prepared UWMPs (including Water Shortage Contingency Plans and water conservation plans) for the following entities: Cities of Redwood City, Menlo Park, San Bruno, Burlingame, Tracy, East Palo Alto, and Foster City, Lathrop, and Valley of the Moon and Westborough Water Districts.
- As part of these efforts, EKI estimated water demands and wastewater generation flow rates, and assessed the reliability of various supplies, including groundwater, State Water Project, Central Valley Project, Russian River, Semitropic, and the Hetch-Hetchy system.
- EKI also evaluated the potential to increase water conservation, including evaluating the penetration rates and water conservation potential of various programs.
- EKI supported city and agency staff in presenting results to council members and other stakeholders.

City of Lathrop – Development of the City's Integrated Water Resources Master Plan

Key Project Elements

- Using water billing data, parcel GIS data, and zoning GIS data to calculate and update land-use-specific water demand factors and wastewater flow generation factors
- Updating and refining City's water system, wastewater system, and recycled water system infrastructure geodatabases (GIS)

Date of Services: 2016 to present
Client Contact: Greg Gibson, City Engineer, (209) 941-7220



- Managing, updating, and refining the City's Water System, Wastewater System and Recycled Water GIS infrastructure databases.
- Building water, wastewater, and recycled water hydraulic models that are integrated with the GIS infrastructure databases.
- Allocating parcel-level water demands and wastewater flows to hydraulic modeling nodes in GIS.
- A key focus of this effort was using water billing data, parcel GIS data, and zoning GIS data to calculate and update land-use-specific water demand factors and wastewater flow generation factors. This effort required EKI to compile and manage a database of over 1 million records of customer water billing data linked for water demand analyses.
- As a result of the work in the first phase of this project, the City has asked EKI to conduct additional projects (sole-source), including prepare their 2015 UWMP, Sewer System Management Plan, and conducting additional water and wastewater modeling for development.

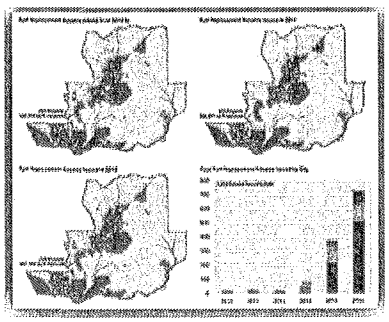
Solano County Water Agency (SCWA) - Residential Water Use and Conservation Potential Study

Key Project Elements

- Account-level evaluation of water use and drought response by 80% of the County's single-family residential customers
- Detailed geospatial analyses of conservation program participation to identify participation drivers
- Strategic targeting of future conservation program efforts

Date of Services: 2015 - 2017

Client Contact: Andrew Florendo, Water Conservation Coordinator, (707) 455-1111



- EKI analyzed an over-6-million-record dataset of account-level water use from city water billing systems to quantify the real impact of water conservation programs on water use and evaluate drought response on an account-level basis. Customer account data and conservation program implementation records were matched with Assessor's Parcel Numbers (APNs) to allow for attribution of property and land use characteristics as well as for the importation of the water use data into ArcGIS for mapping and geospatial analyses.
- Assisted Solano County Water Agency and its nine retail agencies with quantifying the water conservation benefits achieved to date, the remaining water conservation potential, and identifying potential new water conservation programs for implementation.
- Evaluated geospatial performance of various water conservation programs and account-level water savings achieved to date relative to a representative cohort.
- Used spatial statistical analysis to identify "hot spots" and "cold spots" of program participation and related factors (i.e., socio-economic levels).
- Conducted multi-variant analyses to the identify location and volume of remaining water conservation potential to facilitate strategic water conservation program targeting and delivery.
- Evaluated water conservation program participation relative to income neighborhoods, identifying significant areas of conservation opportunity.
- Conducted an account-level analysis of customer water use during the historic 2012-2016 drought.
- Project was conducted in two phases: Phase 1 consisted of a pilot study focusing on the City of Vallejo to develop the analytical methodology, and the Phase 2 study expanded the analysis to additional cities representing over 80% of the single-family residential accounts in the SCWA service area. Phase 2 also included analysis of income effects on program participation and analysis of drought water use.

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Anona L. Dutton, P.G., C.Hg.

Vice President/ Principal-in-Charge
Director of Water Resources Practice

Education

- Stanford University, M.S. Hydrogeology, 2000
- Stanford University, B.S. Environmental Sciences, 1998

Registrations/Certifications

- Professional Geologist in California (#7683)
- Certified Hydrogeologist in California (#841)
- LEED Green Associate
- Water Use Efficiency Practitioner – Grade 1

Summary of Experience

Ms. Dutton has over seventeen years of professional experience managing water resources projects. She has managed multi-million dollar efforts to secure reliable water supplies for water agencies and developers, including leading the technical efforts to minimize the water footprint of new and existing development, assessing groundwater and surface water supply yields, securing water transfer options, and evaluating the feasibility of developing new water supply sources such as recycled water, desalination water, and other non-potable sources (stormwater, rainwater, and greywater). Her work to support public sector clients has included Water Supply Assessments, Water Supply and Water System Master Plans, and Urban Water Management Plans and Water Conservation Plans. Ms. Dutton is also deeply involved in implementation of the Sustainable Groundwater Management Act (SGMA) throughout the State, including provision of strategic and technical support for Groundwater Sustainability Agency formation and basin boundary adjustments. Having worked in both the private and public sectors, Ms. Dutton brings a unique perspective to her work to meet the needs of her municipal, private, and attorney clients.

Detailed Experience

WATER SUPPLY ASSESSMENTS

- As part of a SB 610 Water Supply Assessment (WSA) analysis Ms. Dutton performed an evaluation of the water demand and water supply alternatives for a proposed new community located in San Benito County, California. Ms. Dutton prepared projections of the potable water demand of the development, estimated historic groundwater use at the Site, and evaluated the potential water supply, transport, and treatment options available to her client, including quantifying the volume of water available from each water source, its reliability during design drought scenarios, and the political and technical constraints associated with development of each water source. Ms. Dutton worked with the local water district to prepare a water supply assessment for the development based on groundwater as the supply source.

- As part of a WSA analysis Ms. Dutton performed an assessment of water demands and water supply alternatives for a proposed new community located in Northern California. Ms. Dutton prepared projections of the potable water demand of the development, estimated the potential groundwater yield at the Site, and evaluated the potential water supply options available to her client, including quantifying the volume of water available from each water source and the political and technical constraints associated with each water source.

- As part of a WSA analysis Ms. Dutton performed an assessment of water demand and water supply alternatives for the Tejon Mountain Village, a large-scale development located in Southern California. Ms. Dutton evaluated the potential to locally develop groundwater as a water supply source for the Project, as well as assisted in the evaluation of surface water conveyance options. As part of the groundwater basin safe yield analysis that Ms. Dutton performed, she installed several deep groundwater wells and conducted aquifer pump tests. The resultant water level and aquifer property

data were used, along with local streamflow, historic groundwater use, and precipitation data to develop a water balance, and safe yield estimate for the groundwater basin.

- As part of a WSA analysis Ms. Dutton performed an assessment of water demand and water supply alternatives for the Grapevine Project, a large-scale development located in southern Kern County. The project's supply portfolio included State Water Project Water, as well as recycled water.
- Ms. Dutton has prepared several WSAs for major development projects and General Plan amendments throughout the San Francisco Bay Area. She has worked successfully with developers, planners and other City staff to compile and analyze the information necessary to evaluate the future water demand and supplies in normal and dry periods, per the requirements of SB 610.

URBAN WATER MANAGEMENT PLANNING

- While at the Bay Area Water Supply and Conservation Agency (BAWSCA), Ms. Dutton supported the 26 BAWSCA member agencies in the development of their 2010 Urban Water Management Plans (UWMPs). In that role Ms. Dutton led several workshops to introduce the agencies to changes in the UWMP Act for the 2010 submittal, developed common language and information for the agencies to include in their UWMPs, and oversaw the development of a spreadsheet tool that supported agencies in evaluating the benefits of regional and sub-regional compliance with Senate Bill X7-7 (i.e., the 20 by 2020 legislation).
- Ms. Dutton prepared the 2015 UWMP for the City of Burlingame. She also developed the 2005 UWMP for the City that incorporated key revisions to UWMP related to the additional requirements of the UWMP Act and the issues related to the expiration of Burlingame's water supply contact with SFPUC in 2009 and their potential use of groundwater for irrigation purposes. She also oversaw development of the City's Water Shortage Contingency Plan and continues to support the City in all is water- and BAWSCA-related issues, including responding to the SWRCB's mandatory water use restrictions.
- Ms. Dutton prepared Menlo Park Municipal Water District's 2015 UWMP. The City is facing unprecedented growth which is causing it to seriously consider the development of alternative water supplies such as recycled water and groundwater. Based on the work that Ms. Dutton has done for the City in terms of developing its UWMP, they sole-source awarded her the development of two WSAs in support of their General Plan amendment and two major redevelopment projects.
- Ms. Dutton prepared Westborough Water District' 2015 UWMP. A major issue that this agency is facing is demand hardening in the face of mandatory water use restrictions and decreased supply reliability. A key focus of the 2015 UWMP update will be the revision to the District' Water Shortage Contingency Plan (WSCP)
- Ms. Dutton prepared City of Redwood City's 2015 UWMP. The City is facing unprecedented growth which is causing it to consider the expansion of alternative water supplies such as recycled water and groundwater. In addition, a key focus of the 2015 UWMP update will be the revision to the District' WSCP.
- Ms. Dutton prepared Estero Municipal Improvement District's/City of Foster City's 2015 UWMP. The City is involved in a major upgrade to its wastewater treatment facility and is therefore interested in exploring the potential to utilized recycled water. In addition, a key focus of the 2015 UWMP update will be the revision to the District' WSCP.
- Ms. Dutton prepared Valley of the Moon Water District's 2015 UWMP. Significant modifications to the reliability of its water supply sources will need to be addressed based on the impacts observed during the historic 2012-2015 drought. In addition, the District's pursuit of supplemental water supplies and development of an Aquifer Storage and Recovery (ASR) program will need to be addressed.

- Ms. Dutton prepared the City of Tracy's 2015 UWMP and sanitary survey. Ms. Dutton also prepared the UWMP for the City in 2005 that projected the future water demands, conservation measures, drought contingency plans, best management practices, and potential future water supplies for one of the fastest growing cities in California. In addition, Ms. Dutton prepared the UWMP for the City of Tracy in 2000 and prepared the Sanitary Survey Study for Tracy in 2000, analyzing all of the potential point and non-point sources of pollution in the watershed that serves the City.
- Ms. Dutton prepared the UWMP for the City of San Bruno in 2005 that incorporated information related to the proposed conjunctive use program for the Westside Groundwater Basin and its implications for San Bruno's future water supply in normal and drought years. Ms. Dutton continues to support the City in all is water- and BAWSCA-related issues, including managing the installation and testing of a groundwater test and municipal production well for the City. The work includes hydrogeologic investigation, water quality sampling, aquifer testing, and test and production well design and construction, and bid support for a 500-foot well designed to produce 500 gallons per minute (gpm).

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Vera H. Nelson, P.E.

Vice President
Hydrogeologist/Water Resources Engineer

Education

- Stanford University, Degree of Engineer in Environmental and Water Resources Engineering and Science, 1986
- Stanford University, M.S. Water Resources Engineering, 1985
- Dartmouth College, B.A. Engineering Science, 1983

Registrations/Certifications

- Professional Civil Engineer in California (C #47418)

Summary of Experience

Ms. Nelson is a registered civil engineer with over thirty years of professional consulting experience managing hydrogeologic studies, groundwater quality assessments, water resources and water supply evaluations, and providing expert and litigation support services. As Vice President and principal hydrogeologist, Ms. Nelson provides technical quality control and review of EKI projects involving hydrogeologic analyses and water resources. In support of these activities, she has performed extensive aquifer testing and analytical and numerical modeling to evaluate groundwater flow, subsurface chemical transport, groundwater basin conditions, and to design groundwater extraction/production wells. Ms. Nelson recently served as a designated expert in the Antelope Valley groundwater adjudication and testified on behalf of a large landowner in Los Angeles Superior Court. The expert report utilized available satellite imagery, cropping information, CIMIS data, crop water duty information, and infrared aerial photography to establish historical agricultural groundwater use on the client's property. She has performed basin sustainable yield assessments, water resource evaluations, water supply assessments and water resources evaluations for municipalities, agricultural landowners, and large-scale developers of properties. She has worked for over 30 years on issues related to groundwater quality and sustainability that currently govern Sustainable Groundwater Management Act (SGMA) requirements being implemented throughout California today.

Detailed Experience

- Ms. Nelson is managing Marina Coast Water District's (MCWD) SGMA Groundwater Sustainability Planning Study. She has also performed a feasibility study evaluating the technical viability and potential costs of recharging underlying aquifers with winter-time storm flows from the Salinas River and/or tertiary treated wastewater from the Monterey Regional Water Pollution Control Agency Waste Water Treatment Plant. Analytical groundwater modeling was conducted to evaluate potential percolation and injection rates into different aquifer zones. The Feasibility Study also evaluated the potential of utilizing the shallow unconfined aquifer for storage of intermittent river storm flows to limit size of and flow variability to surface water treatment facilities. Ms. Nelson recently reviewed the California America Water (CalAm) Monterey Peninsula Water Supply Project (Project) Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) on behalf of MCWD district. The Project includes a groundwater intake system consisting of 10 subsurface slant wells that will draw seawater and groundwater from aquifers that underlie MCWD Service Area. An extensive review of the numerical MODFLOW groundwater model presented in EIR/EIS was conducted. The modeling was found to be deficient because it did not accurately reflect baseline water quality conditions or hydraulic heads. Detailed public comments on the draft EIR/EIS were developed and submitted on behalf of MCWD outlining groundwater model deficiencies and providing recommendations for additional characterization and model modifications to better reflect project impacts on the groundwater basin.
- Ms. Nelson is assisting a Native American tribe in complying with a negotiated agreement with County regulators regarding use of groundwater to supply the tribe's planned gaming and entertaining

facility. The primary provisions of the agreement require the tribe to perform groundwater monitoring and develop a groundwater model and water budget for the project to evaluate potential impacts of the project on surrounding wells. Ms. Nelson has overseen development and implementation of a monitoring program, development of the groundwater model, and preparation of monitoring reports and presentation materials for ongoing discussions with the County. Significant project cost savings for the client have been achieved through the approved use of existing groundwater wells for most monitoring, and through repeated refinement of the monitoring and reporting schedules as warranted by relatively stable monitoring results.

- Ms. Nelson provided expert testimony in Los Angeles Superior Court in the Antelope Valley groundwater basin adjudication in Southern California. The proceedings involve the establishment of water rights for the hundreds of private and public entities that extract groundwater from this basin. Many of these entities were agricultural users, including carrot farmers that rely on groundwater to grow crops. As part of her work on this project, Ms. Nelson reviewed hydrogeologic data and groundwater conditions, including groundwater models developed by various parties to assess the sustainable yield of the basin. In 2013, Ms. Nelson prepared an expert report that was submitted to the Court that documented the historical groundwater and in lieu surface water use for agricultural irrigation on the client's property. The expert report utilized available satellite imagery, cropping information, CIMIS data, crop water duty information, and infrared aerial photography to establish historical groundwater use on the client's property during selected time periods. Documented surface water deliveries are utilized to corroborate the historical groundwater use estimates that were developed on the basis of cropping information. The case settled and the client was awarded substantial groundwater rights based on work and testimony provided by Ms. Nelson.

- Ms. Nelson serves as the principal hydrogeologist overseeing the assessment of groundwater supplies for a proposed new community in San Benito, California. The proposed new community overlies 4,000 acres and is projected to utilize over 4,000 acre feet of water annually. She has overseen hydrogeologic studies conducted to assess the safe yield of the groundwater aquifer and evaluated its potential to serve the community as the primary water supply. These studies evaluate sources of recharge to the aquifer, impact of drought conditions on water levels and current and projected demands on groundwater within the aquifer. These studies are being used to meet the requirements of a Water Supply Assessment for the proposed community, which is being conducted Pursuant to Senate Bills 610 and 221 (Kuehl-Costa). Ms. Nelson was also involved in the evaluation of potential supplemental water supplies for the community and the associated technical, legal and political constraints associated with securing such supplies.

- Ms. Nelson served as the principal hydrogeologist and expert for four major U.S. aerospace companies in association with a regional trichloroethylene (TCE) Plume within the Chino groundwater basin in Southern California. The Chino groundwater basin is adjudicated and a major source of drinking water for the cities of Ontario, Upland, and Chino. Ms. Nelson represented the companies in mediation sessions with the City of Ontario, City of Upland, and Inland Empire Utility Agency (IEUA) held at JAMS in Los Angeles, California. Ms. Nelson served as the primary technical representative and hydrogeologist for the companies in its negotiations with State Water Resources Control Board, Santa Ana Regional Water Quality Control Board (RWQCB), and technical subcommittee formed to evaluate potential joint water supply and groundwater remedial alternatives within the Chino Basin. As part of her work on this project, Ms. Nelson performed groundwater flow and fate and transport modeling, developed a feasibility study and identified cost effective remedial actions that leverage existing regional groundwater extraction and treatment systems operated by the Chino Basin Desalter Authority. A detailed analysis of applicable or relevant and appropriate requirements (ARARs) was performed as part of the development of the feasibility study compliant with the 1990 National Oil and Hazardous Substance Pollution Contingency Plan (NCP). The feasibility study and associated cost

estimates provided the basis for the selected remedy adopted by all of mediation parties and the RWQCB.

- Ms. Nelson led the preparation of Water Supply Assessments (WSAs) for the City of Santa Cruz's Sphere of Influence (SOI) Amendment Project and its 2030 General Plan. Both projects are highly controversial and have received significant scrutiny and opposition by portions of the community. The WSAs evaluated the availability of the City's water supply sources to meet long-range demands during both normal and dry years. The City's water supply sources included groundwater, surface water diversions, and surface water reservoir. The City's water supplies are very limited and significant curtailment of water use is required during drought periods.
- Ms. Nelson assessed availability of San Bruno's groundwater supplies as part of EKI's preparation of San Bruno's 2010 Urban Water Management Plan (UWMP). This UWMP describes the potential for development of a conjunctive groundwater use program that would increase San Bruno's water supply reliability in drought years. The UWMP also discusses reliability of the City's surface water supplies and the potential long-term effect of salt water intrusion on the City's groundwater resources.
- Ms. Nelson served as principal hydrogeologist overseeing the assessment of a potential groundwater supplies for a proposed new community in Kern County, California. Groundwater was evaluated as a potential supplemental water supply for the community and will be used to augment available surface water supplies. The studies conducted as part of this assessment included installation of deep groundwater monitoring wells, geophysical logging, water quality testing, and extensive aquifer pump testing. Data from these investigations were used to assess the basin characteristics and safe yield of the primary aquifer. Data from these investigations will also be used to develop a groundwater management plan that will focus on identifying appropriate locations and timing for groundwater withdrawals and long-term uses of groundwater within the community. The groundwater management plan will consider potential constraints on groundwater withdrawals such as groundwater seepage from existing lakes and water needs of existing wetlands.
- Ms. Nelson served as principal hydrogeologist overseeing the assessment of a potential aquifer storage and recovery system (ASR) at a 15,000-acre property located in northern California. As part of this assessment, a conceptual model of the geohydrology of the Basin was developed and evaluated. Ms. Nelson also aided the client in developing a strategy to facilitate the sale of surface water from its property. This work included the development of an approach to demonstrate that use by the Client of groundwater en lieu of surface water would not result in negative impacts to the local groundwater basin, as required under a new County Groundwater Ordinance.
- Ms. Nelson served as principal hydrogeologist overseeing the evaluation of potential groundwater supplies for the City of Burlingame. The evaluation focused on assessing groundwater as a potential emergency supply in the event of a disruption of other water supplies. As part of this evaluation, groundwater models for the basin were reviewed, other users and their influence on the basin were evaluated, and a sustainable groundwater yield for the City of Burlingame was estimated.
- Ms. Nelson oversaw the recalibration of a complex 3-D hydrological flow model (MODFLOW) that was used to optimize a 20 well pump-and-treat system for a multilayer aquifer consisting of fractured carbonate bedrock. The system controls offsite migration of chemical contaminants in groundwater while minimizing downward vertical gradients to mitigate the risk of DNAPL mobilization.

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Kathryn L. Wuelfing, MESM

Environmental Scientist

Education

- University of California, Santa Barbara, Master of Environmental Science and Management – Water Resources, Pollution Prevention and Remediation, 2006
- Santa Clara University, B.S. in Environmental Science, Biology, 2004

Registrations/Certifications

- AWWA Water Use Efficiency Practitioner – Grade 1 (#1526)
- Forty-hour Hazwoper Training Course

Summary of Experience

Ms. Wuelfing has over eleven years of experience in environmental sciences and water resources. Her work at EKI has included water resources planning; conservation program evaluation and modeling; development of spreadsheet-based and database tools for use by clients; groundwater and stormwater hydrogeologic modeling; predictive modeling of water use, sewer flows, and wastewater quality for municipal water agencies; and developing SB 610-compliant Water Supply Assessment (WSAs). Ms. Wuelfing's technical skills include design and management of relational databases, geo-spatial relational databases (ESRI ArcGIS tools), SQL programming, data visualization, and statistical analysis.

Detailed Experience

- **Detailed Studies of Water Conservation Program Effectiveness.** Ms. Wuelfing performed a two-phase study for the Solano County Water Agency (SCWA), evaluating the effectiveness of SCWA's single-family residential water conservation programs and demonstrating measurable water savings. Ms. Wuelfing analyzed a 6 million-record dataset of account-level water use from four cities' water billing systems to quantify the real impact of water conservation programs on water use and evaluate drought response on an account-level basis. Ms. Wuelfing also used geospatial statistical and multi-criteria analysis techniques within ArcGIS to evaluate geographic trends in program participation and to identify opportunities for future water conservation potential. Based on these analyses, Ms. Wuelfing developed recommendations for future program design and customer outreach and targeting. The studies also analyzed income-effect on water conservation participation, objectively identifying the demographics of Solano County households with significant remaining water conservation potential. The pilot study focused on the City of Vallejo and was expanded for the for the second phase to include additional cities and capture over 80% of the single-family residential accounts in Solano County.

- **Development of EKI's Drought Response Tool.** Ms. Wuelfing developed EKI's Drought Response Tool (DRT), an Excel-based spreadsheet model used by over 35 California water agencies to facilitate rapid response to drought conditions. The DRT is used to help agencies identify water savings opportunities, by customer sector and major end-use, and to quantify and compare the potential water savings benefits of implementing various suites of drought response actions. Agencies have utilized the DRT to respond to the current historical drought as well as to develop and their Senate Bill X7-7-complaint Water Shortage Contingency Plans as a part of the Urban Water Management Plan (UWMP) development process.

- **Customer Water Use Database Development in Support of the City of Lathrop's Integrated Water Master Plan.** Ms. Wuelfing developed a database for use in analyzing customer water use for the City of Lathrop as part of the development of the City's Integrated Water Master Plan. This effort included importing over 1 million records of customer water use data from the City's utility billing system with Assessor's Parcel Numbers ("APNs") to allow for attribution of property and land use characteristics as well as for the importation of the water use data into ArcGIS for mapping and geospatial analyses. These data were used to develop land-use specific water demand factors for future development within the City and support water supply and wastewater planning.

- **Evaluation of Effects of Water Conservation on Wastewater Quality.** Ms. Wuelfing created a model based on a water conservation tracking tool (Alliance for Water Efficiency Tracking Tool) to predict the increase in total dissolved solids (salinity) and decreased sewer flows over a 40-year horizon for the City of Woodland. The model incorporated the effects of plumbing code changes, installation of water meters, and conservation programs that will be implemented to achieve the water use reductions mandated by Senate Bill X7-7 on water use. The model also considered a potential change in supply source and evaluated a potential program to reduce salinity input to the system by regulating home water softeners. The results of this study are being used by the City of Woodland to evaluate their future water supply sources, the need for capital improvements to their wastewater treatment systems, and consideration of regulation of water softeners.

- **San Mateo Plain Groundwater Subbasin Assessment.** Ms. Wuelfing developed and managed an extensive database of groundwater data and provided stakeholder outreach services in support of the first-ever comprehensive groundwater basin assessment for the San Mateo Plain Groundwater Subbasin, which underlies the eastern portion of San Mateo County. As part of this effort, Ms. Wuelfing created detailed and documented This effort will establish a comprehensive understanding of the basin and assist the basin with future management and compliance with Sustainable Groundwater Management Act (SGMA), in the event that the Basin becomes subject to SGMA requirements. This work is being done with a strong public outreach and engagement process, which has included multiple stakeholder workshops lead by EKI.

- **Urban Water Management Plans.** Ms. Wuelfing worked with various cities and agencies in the San Francisco Bay Area to develop their 2015 Urban Water Management Plans (UWMPs), including Cities of Foster City and Burlingame. These documents serve as updates to agencies' 2010 UWMPs and revise the content as per the requirements of the Department of Water Resources' (DWR's) 2015 UWMP guidelines. As part of that effort she compiled historical water use information, projected future demands based on population growth and water conservation assumptions, and assessed the Cities' development recycled water supplies. Ms. Wuelfing evaluated their progress on reaching their targeted reductions as per Senate Bill X7-7 and their State Water Resources Control Board (SWRCB) mandated water conservation target, as well as demand management measures as they relate to supply reliability and demographic projections going forward.

- **Water Supply Assessment to Support a Sphere of Influence Change.** Ms. Wuelfing prepared a SB 610 compliant Water Supply Assessment to support the City's Sphere of Influence (SOI) Amendment Project. The SOI Amendment Project was one stipulation of a comprehensive settlement agreement resulting from litigation of the University of California (Santa Cruz) Long Range Development Plan (LRDP). Pursuant to the settlement agreement, the City is expanding its SOI to provide extraterritorial water and sewer service to portions of the University that will be developed under the LRDP. The City's WSA evaluated the availability of the City's water supply sources to meet the demands of the University's LRDP in addition to the City's existing and planned water uses, during normal and dry years over a 20-year horizon. The City of Santa Cruz's water supplies include groundwater, surface water, a proposed desalination plant, and increased conservation and curtailment measures.

- **Water Supply Assessment to Support a General Plan Update.** Ms. Wuelfing prepared of a Water Supply Assessment for the City of Santa Cruz to support the development of the City's 2030 General Plan. As a Water Supply Assessment is not required by SB 610 for General Plan updates, Ms. Wuelfing was pleased to work with the City of Santa Cruz to support proactive and strategic water supply planning in light of the state's increasing water challenges.

- **Stormwater Planning for Proposed Community Development.** Ms. Wuelfing provided the statistical analysis for the development of a model to simulate stormwater runoff water quality for an approximately 2,700-acre proposed new community located in an agricultural area of San Benito

County, California. The model was used to compare measured pre-development chemical concentrations, potential applicable water quality standards, and estimated post-development chemical loads to inform and support strategic water planning decisions for the proposed community.

- **Big-data Management and Analysis.** Ms. Wuelfing has extensive experience with data management, analysis, and quality control of water resources and environmental data, including utility billing system records, geospatial, chemical, and physical data, using several database management platforms, including ESRI ArcGIS and MS Access. She has authored technical reports and planning documents, including the design of figures and complex graphics to communicate data-rich concepts to non-technical audiences. Ms. Wuelfing has also led the migration of historical environmental data to a web-based environmental database to support current and future environmental management projects for a 400+ acre federal research facility in the Bay Area.
- **Hydrogeologic Studies for the Los Padres National Forest, Goleta Office.** At the University of California, Santa Barbara, Ms. Wuelfing analyzed water quality impacts resulting from land management choices within the Los Padres National Forest for the U.S. National Forest Service. Analyses were conducted across the 1.75-milion acre forest, which spans 220 miles and six counties. Based on an integrated analysis of water quality, land use patterns, and hydrological divisions, Ms. Wuelfing developed a predictive statistical model to evaluate the water quality and ecosystem integrity of forest streams to support land management planning. Ms. Wuelfing conducted a second hydrogeologic study of the Los Padres National Forest to determine specific areas across the forest where the hydrogeologic conditions are most likely to support the existence of vernal pools, allowing the Forest Service to target areas for on-the-ground identification and conservation of vernal pool habitat.

Selected Presentations

AWWA California-Nevada Section Annual Fall Conference 2017, Reno, CA (10/2017), *Streamlining Water Conservation Program Implementation in a Post-Drought World.*

AWWA California-Nevada Section Annual Fall Conference 2017, Reno, CA (10/2017), *Taking the Temperature on Drought Response Effectiveness.*

WaterSmart Innovations 2017 Conference, Las Vegas, NV (10/2017), *Taking the Temperature on Drought Response Effectiveness.*

AWWA California-Nevada Section Annual Fall Conference 2016, San Diego, CA (10/2016), *Yes, Conservation Programs Do Save Water! Here's How Much...*

WaterSmart Innovations 2016 Conference, Las Vegas, NV (10/2016), *Yes, Conservation Programs Do Save Water! Here's How Much...*

AWRA 2016 Summer Specialty Conference on GIS & Water Resources IX, Sacramento, CA (7/2016), *A Geospatial Approach to Evaluating and Targeting Water Conservation Programs.*

WaterSmart Innovations 2015 Conference, Las Vegas, NV (10/2015), *Drought Response Planning Workshop* (Half-Day Workshop).

WaterSmart Innovations 2011 Conference, Las Vegas, NV (10/2011), *Incorporating Water Conservation into Water Demand Projections.*

AWWA 2010 Sustainable Water Management Conference, Albuquerque, NM (4/2010), *Water Demand Forecasting for a Sustainable Residential Development in California: A Case Study.*

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Jonathan P. N. Sutter, P.E.

Environmental Engineer

Education

- Stanford University, M.S. Civil and Environmental Engineering, 2012
- Columbia University, B.S. Civil Engineering, 2008

Registrations/Certifications

- Professional Civil Engineer in California (C #81606)
- Forty-hour Hazwoper Training Course

Summary of Experience

Mr. Sutter is a civil engineer with an educational background in water resources, urban hydrology, water quality, and environmental and civil engineering. He has over six years of project experience in water and wastewater collection, distribution, and treatment planning, design, design services during construction, and construction management and observation. Mr. Sutter has experience using hydraulic modeling software to evaluate water distribution and wastewater collection system performance.

Detailed Experience

- **Project Engineer for City of Lathrop's Integrated Water Master Plan.** Mr. Sutter is currently serving as project engineer for the preparation of the City of Lathrop's Integrated Water Resources Mater Plan, which includes comprehensive updates to the Water System, Wastewater System, and Recycled Water System Master Plans and associated CIPs. Mr. Sutter has led efforts to update the City's infrastructure and land use GIS databases to develop new GIS-integrated hydraulic models, evaluate the City's potable and recycled water demands and wastewater flows projections, and evaluate the City's future water supply and reliability. Mr. Sutter has led coordination efforts with the City staff and participated in the outreach efforts with the project stakeholders, including the City's development community.
- **Project Engineer for City of Brisbane's Water and Sewer Master Plans.** Mr. Sutter serves as project engineer for the City of Brisbane's Sewer System Master Plan Update and Water System Mater Plan Update. Mr. Sutter worked with the client to develop new baseline and projected future water demands and sanitary flows to account for changes in water demand conditions since the preparation of the prior master plans. Based on his analysis of the city's sewer system infrastructure needs through hydraulic modeling with SewerCAD and review of the City's sewer system condition assessment, EKI has refined a $3 million capital improvement program to upgrade the city's sewer system. Mr. Sutter also assisted with development of the $12 million updated water system capital improvement program. Through strategic analysis of fire flows, EKI shaved pipeline projects from the original water system CIP program – while still fulfilling the hydraulic design criteria – through recommending the efficient use of short-cut interties and pressure reducing valves between pressure zones.
- **Project Engineer for Grapevine Project Water, Wastewater, and Recycled Water Planning.** Mr. Sutter assisted with an assessment of water demands for the Grapevine Project, a proposed new community located in Kern County, California with an estimated population of 35,000+ people. Water demand projections were prepared for potable, non-potable and recycled water. In addition, Mr. Sutter performed an assessment of wastewater flows and prepared the conceptual designs of wastewater treatment and recycled water storage facilities. The conceptual wastewater treatment facility design incorporated analysis of multiple alternatives for the unit operations. The wastewater treatment design technical report was prepared as a support document to the development's Environmental Impact Report. Additionally, Mr. Sutter analyzed the rainwater capture potential and feasibility of implementing various rainwater harvesting alternatives.

- **Water, Wastewater, and Recycled Water Planning for New Development**. Mr. Sutter evaluated a proposal to design, build, operate, and finance water, wastewater, and recycled water facilities for a new development in rural northern California. As part of the evaluation, Mr. Sutter reviewed the proposer's financial model and compared projected water and sewer rates to those of other northern California cities. Mr. Sutter also prepared a water balance to evaluate the necessary sizes of development's recycled water storage facilities.
- **Water Main Replacement Design.** Mr. Sutter was the project engineer for design of the Coastside County Water District's (CCWD's) El Granada Pipeline Replacement Final Phase Project. The Project relocated the existing 1940's era welded steel pipe that was previously strapped to the aging Main Street Bridge in Half Moon Bay, California to an alternative creek crossing site approximately 100 feet downstream of the existing bridge. The Project involved the installation of 1,200 linear feet of new 16-inch-diameter pipe including crossing of an existing creek using horizontal directional drilling construction methods. Mr. Sutter was responsible for coordination of the design team including the trenchless construction specialty engineer, geotechnical engineer, and surveyor. He was also responsible for development of all plans, specifications, and cost estimates for the project.
- **Water Main Replacement Design.** Mr. Sutter was the project engineer for design of the Town of Hillsborough's Ralston Avenue Pepper Avenue Water Main Replacement Project. The project will replace the existing 10-inch diameter ductile iron pipeline with a new 12-inch PVC pipeline. The project is challenging due to the presences of numerous existing water, storm drainage, and sewer utilities including three 60-inch diameter reinforced concrete pipelines owned by the San Francisco Public Utilities Commission. Mr. Sutter was responsible for development of all plans, specifications, and cost estimates for the project and consolidating the project's construction documents with those for a separate sewer system hydraulic improvement project.
- **Water Demand Projections.** Mr. Sutter managed the preparation of water demand projections for a large-scale development project in the San Francisco Bay Area to evaluate the project's future water demand under various water use efficiency scenarios. Each scenario reflected the minimum indoor and outdoor efficiency standards and conservation measures required by California codes, executive orders, and agency ordinances, as well as all applicable local ordinances. The alternative water efficiency scenarios estimated water demand reductions that can be achieved by up to two tiers of increasing the levels of efficiency and conservation above the required minimum standards.
- **Preparation of Water Supply Assessments.** Mr. Sutter assisted with the preparation of water supply evaluation for a General Plan Update for the City of Menlo Park. The water supply evaluation is prepared as a support document to the development of the Environmental Impact Report. Key to this project is to ensure the evaluation is consistent with updated contents in the City's 2015 UWMP and aligning with the timing of information that will available from regional and local agencies during the upcoming planning process. Mr. Sutter is assisting with the evaluation of the project's future water demand and its supply and demand implications during normal and dry periods.
- **Drought Response Planning.** Mr. Sutter assisted with the preparation of a Drought Response Plan for the Central Basin Municipal Water District, a wholesale water district that serves 39 municipal water retailers in Southern California. As a part of the Drought Response Plan, Mr. Sutter assisted in the development of a spreadsheet model (Drought Response Tool) for each of the retail in order to understand how their community uses water, quantitatively evaluate potential drought response measures in order to develop targeted drought response programs, and to continually track and assess their progress with respect to the SWRCB-mandated conservation target. The module helps quantify potential water use reduction of various water conservation measures for each of the retail agencies based on an end use water savings methodology.

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Attachment C

EKI Schedule of Charges, dated 22 March 2018

Client/Address: **Marina Coast Water District**
Mike Wegley
11 Reservation Road
Marina, CA 93933

Proposal/Agreement Date: 22 March 2018

EKI Project # B7-160

SCHEDULE OF CHARGES FOR EKI ENVIRONMENT & WATER, INC. [1] **22 March 2018**

Personnel Classification	Hourly Rate
Officer and Chief Engineer-Scientist	280
Principal Engineer-Scientist	270
Supervising I, Engineer-Scientist	260
Supervising II, Engineer-Scientist	250
Senior I, Engineer-Scientist	238
Senior II, Engineer-Scientist	225
Associate I, Engineer-Scientist	213
Associate II, Engineer-Scientist	199
Engineer-Scientist, Grade 1	185
Engineer-Scientist, Grade 2	175
Engineer-Scientist, Grade 3	160
Engineer-Scientist, Grade 4	140
Engineer-Scientist, Grade 5	124
Engineer-Scientist, Grade 6	109
Technician	128
Senior GIS Analyst	113
CADD Operator / GIS Analyst	100
Senior Administrative Assistant	125
Administrative Assistant	99
Secretary	82

Direct Expenses

Reimbursement for direct expenses, as listed below, incurred in connection with the work will be at cost plus ten percent (10%) for items such as:

a. Maps, photographs, reproductions, printing, equipment rental, and special supplies related to the work.
b. Consultants, soils engineers, surveyors, drillers, laboratories, and contractors.
c. Rented vehicles, local public transportation and taxis, travel and subsistence.
d. Special fees, insurance, permits, and licenses applicable to the work.
e. Outside computer processing, computation, and proprietary programs purchased for the work.

A Communication charge for e-mail access, web conferencing, cellphone calls, messaging and data access, file sharing, local and long distance telephone calls and conferences, facsimile transmittals, standard delivery U.S. postage, and incidental in-house copying will be charged at a rate of 4% of labor charges. Large volume copying of project documents, e.g., bound reports for distribution or project-specific reference files, will be charged as a project expense as described above.

Reimbursement for company-owned automobiles, except trucks and four-wheel drive vehicles, used in connection with the work will be at the rate of sixty cents ($0.60) per mile. The rate for company-owned trucks and four-wheel drive vehicles will be seventy-five cents ($0.75) per mile. There will be an additional charge of thirty dollars ($30.00) per day for vehicles used for field work. Reimbursement for use of personal vehicles will be at the federally allowed rate plus ten percent (10%).

CADD Computer time will be charged at twenty dollars ($20.00) per hour. In-house material and equipment charges will be in accordance with the current rate schedule or special quotation. Excise taxes, if any, will be added as a direct expense.

Rate for professional staff for legal proceedings or as expert witnesses will be at a rate of one and one-half times the Hourly Rates specified above.

The foregoing Schedule of Charges is incorporated into the Agreement for the Services of EKI Environment & Water, Inc. and may be updated annually.

[1] Formerly known as Erler & Kalinowski, Inc.