

Exhibit A



August 8, 2023

Kendall Stahl, PE
Northern Cities Management Area Technical Group
c/o Water Systems Consulting, Inc.
805 Aerovista Pl. Suite 201
San Luis Obispo, CA 93401

Subject: Proposal for Northern Cities Management Area 2023 Annual Monitoring Report

Dear Ms. Stahl,

GSI Water Solutions, Inc. (GSI), is pleased to submit this proposal to the Northern Cities Management Area (NCMA) Technical Group (TG) for the preparation of the NCMA 2023 Annual Report.

Thorough and accurate quarterly monitoring and annual reporting are essential to meeting the terms of the adjudication of the Santa Maria Groundwater Basin, specifically the 2005 Stipulation requirements. GSI offers the continuity of expertise and personnel to make this happen: The key GSI personnel assigned to this project include **Nate Page**, **Dave O'Rourke**, **Sydney Robertson**, and **Paul Sorensen** all of whom have been intimately involved in this work for the past several years. Also, as we have for the last 10 years, we will partner with **Sam Schaefer** of GEI Consultants, Inc. (GEI), to ensure continuity with the same comprehensive team. We will continue to use BSK Associates, an Environmental Laboratory Accreditation Program (ELAP)-certified analytical testing laboratory, to perform the laboratory water quality analyses.

This proposal focuses on the scope of work needed to complete quarterly monitoring of the NCMA sentry wells and prepare the 2023 Annual Report.

Thank you for the opportunity to continue working with you and the NCMA TG.

Sincerely,
GSI Water Solutions, Inc.

A handwritten signature in black ink that reads "Nate Page".

Nate Page, PG, CHG
Supervising Hydrogeologist
npage@gsiws.com

A handwritten signature in black ink that reads "Dave O'Rourke".

Dave O'Rourke, PG, CHG
Principal Hydrogeologist
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Statement of Understanding and Scope of Work

Statement of Understanding

The NCMA is one of three management areas in the adjudicated Santa Maria Groundwater Basin (SMGB). It is subject to several agreements and orders, including a Settlement Agreement (2002), Settlement Stipulation (2005), and Judgment After Trial (2008).

One of the obligations of the 2005 Stipulation requires the NCMA to produce an Annual Report. Per the stipulation, the report must summarize results of the NCMA's groundwater monitoring program, document changes in groundwater supplies, and identify threats to the groundwater resource. The report also must include a tabulation of area-wide water production by documenting the availability and use of imported water, return flow entitlement and use, availability and use of other developed water, and groundwater extractions.

Two of our project team members (Paul and Sam) have been working on these reports since 2010. In more recent years, Nate has moved into the project manager role and Dave has assumed the role of principal in charge. Paul is routinely briefed on important NCMA issues and remains available as a key senior advisor to the project. Sydney will continue to lead field efforts. We are proposing the same team of experienced professionals to bring a familiarity and efficiency to the process that allows us to continue our established procedures for gathering and managing data, preparing the quarterly monitoring reports and annual reports, and providing technical expertise to the TG. At the same time, the GSI team is committed to continue looking for ways to improve data collection and analysis and will engage the TG regularly to ensure the ongoing collection and reporting of meaningful data.

Scope of Work

The following scope of work is based on the requirements in the 2021 Annual Report Request for Proposals (RFP), as well as our experience preparing the Annual Reports and associated quarterly monitoring reports since 2010. Additionally, we are drawing on our work in other areas of the SMGB and our years of experience conducting similar work for our clients.

Task 1.1: NCMA Groundwater Monitoring and Report Schedule

The current contract for technical services related to the 2022 Annual Report will terminate on August 31, 2023. Assuming a Notice to Proceed (NTP) and authorization of the 2023 Annual Report project will be issued on or before September 1, 2023, we will provide a detailed schedule of all tasks, anticipated meetings, and report preparation efforts within 14 days. We have included a general schedule later in this proposal; a final schedule will be prepared and submitted in mid-September.

Task 1.2: Meetings

The NCMA TG holds monthly meetings to share data and results and foster collaboration. Nate Page, GSI's project manager, will generally participate in the regularly scheduled meetings; Dave O'Rourke will also attend most meetings and will attend in lieu of Nate if unavoidable conflicts arise. Nate and/or Dave will also participate in the SMGB Management Area Technical Subcommittee Meetings,

as well as any other coordination meetings. As needed, Nate and/or Dave will work with the NCMA project manager to prepare agenda items and follow up on action items. Paul Sorensen and Sam Schaefer will participate in various meetings throughout the year when specifically beneficial to the project.

Task 1.3: NCMA Groundwater Monitoring and Water Quality Sampling

The NCMA is responsible for the collection of groundwater level measurements and water quality information from the NCMA monitoring network. The GSI team will complete four rounds of water level monitoring and water quality testing. The monitoring and testing will occur quarterly (October 2023, January 2024, April 2024, and July 2024) in coordination with the County of San Luis Obispo's semiannual groundwater monitoring cycle and the NCMA municipalities' groundwater monitoring schedule. We have conducted this work for the past 13 years and are thoroughly familiar with the process and procedures (and, perhaps more importantly, the potential problems and pitfalls).

During each sampling event, we will collect groundwater depth measurements in accordance with American Society for Testing and Materials (ASTM) Standard D4750-87, and groundwater water quality samples in accordance with ASTM standard D4448-1. We will use a variety of methods including low-flow methods in the case of the Oceano CSD monitoring wells. For each quarterly sampling event, field personnel will:

- Coordinate with BSK Associates for delivery of sample bottles and arrange for a courier to ensure timely delivery of the samples to the laboratory.
- Collect synoptic field measurements of depth to water (in accordance with ASTM Standard D4750-87) from all 15 monitoring wells¹ including:
 - 32S/12E-24B01 through -24B03 (North Beach Campground)
 - 32S/13E-30F01 through -30F03 (Highway 1)
 - 32S/13E-30N01 through -30N03 (Pier Avenue)
 - 12N/23W-36L01 and -36L02 (Oceano Dunes)
 - Three Oceano CSD monitoring wells¹
 - 12N/35W-32C03 (County Monitoring Well #3)
- Collect representative water samples from each of the 15 monitoring wells¹ at 6 sites for the constituents listed in the RFP (note that the three shallow sentry wells—24B01, 30F01, and 30N01—are sampled for water quality during the second and fourth quarters only).

We will conduct sampling events as we have done previously. We will perform the sampling of the wells using a combination of ISCO-type peristaltic pumps and a Grundfos RediFlo2, or similar, electric submersible pump as appropriate for each well. Each well will be purged in accordance with ASTM D4448-1 until clear water is produced and field-measured water quality parameters stabilize. Then we will collect samples in containers with appropriate preservatives, place them in iced coolers immediately following collection, and maintain them at the appropriate temperature for transportation to BSK Associates. We will complete chain-of-custody documentation for all samples.

¹ As of Q1 2022 the Oceano CSD MW-Yellow well has been removed from the monitoring program due to deterioration of the well.

As part of our standard QA/QC procedures, we will review data collected from the field and laboratory reports. We will red-flag and address any data not in compliance with ASTM standards for accuracy or reliability and collect new data as necessary. We will enter all data that satisfies our QA/QC procedures into the NCMA database. The data also will be evaluated by the GSI team (as discussed in Task 1.4) and compiled into a quarterly monitoring report for submittal to the TG.

Transducers that measure pressure (water level), temperature, and electrical conductivity are installed in several wells, including:

- 32S/12E-24B03 (North Beach Campground deep well)
- 32S/13E-30F03 (Highway 1 deep well)
- 32S/13E-30N02 (Pier Avenue deep well)
- 12N/23W-36L01 (Oceano Dunes middle well)
- 12N/23W-36L02 (Oceano Dunes deep well)
- 12N/35W-32C03 (County Monitoring Well #3)

Data from these transducers will be downloaded during quarterly monitoring. The transducers will be calibrated as needed, the data compensated for atmospheric pressure variation, and then referenced to the project elevation model. These data will be subjected to QA/QC procedures, then entered in the NCMA database.

Task 1.4: NCMA Groundwater Data Analysis

GSI team members will follow the same procedures and methodologies for data analysis that have been performed for the past 13 years. We will compile and review all data from quarterly groundwater measurements and laboratory analysis, as well as any applicable data collected by the County of San Luis Obispo. We also will collect and compile any data available from the NCMA agencies related to groundwater levels, well production, and water quality. The data will be evaluated and indications of potential hazards (such as well interference, water quality degradation, and seawater intrusion) will be identified. We will interpret data and will calculate and provide historical context of the Deep Well Index².

We will continue the collaborative efforts with the Nipomo Mesa Management Area (NMMA) TG to use basin-wide water level data (north of the Santa Maria River) to generate hydrographs and contour maps for the Annual Report displaying spring and fall conditions.

Time-series plots of historical water quality data for key constituents will be generated at representative wells to show changes over time for those constituents, with special attention paid to coastal wells. The water quality data will be compiled, analyzed, and presented in various ways (time concentration plots and Piper [trilinear] diagrams).

² The Deep Well Index is the average of synoptic groundwater elevation measurements in the three deep sentry wells 24B03, 30F03, and 30N02. This index was developed by the NCMA in 2007 to gauge the ability of the aquifer to withhold potential landward migration of seawater. A Deep Well Index value above 7.5 feet North American Vertical Datum 1988 (NAVD 88) generally indicates that sufficient freshwater flow occurs from the east to the coastline to prevent seawater intrusion.

We will summarize all of the data and document the analysis in the quarterly monitoring report sent to the NCMA TG within 5 weeks of the end of each quarterly monitoring event, and all of the data for the calendar year 2023 will be summarized in the Annual Report.

Task 1.5: Hydrologic Data Compilation

Several sets of hydrologic data are essential for preparation of the Annual Report. We will use the methodology that we modified and adopted in 2015, which improved our understanding of and confidence in the rainfall and evapotranspiration data, and which subsequently improved our ability to calculate an agricultural irrigation applied water estimate. Although we have been working on these Annual Reports for many years, we continue to look for ways to improve upon our data sources and methodology to create better or more efficient analysis. If we identify areas of improvement, we will consult with the NCMA project manager and either incorporate those improvements directly in our work or suggest the changes for subsequent Annual Reports, as appropriate.

Task 1.6: NCMA Water Demand and Availability Analysis

We will prepare a detailed analysis of water production, delivery, and availability within the NCMA. The data collection and analysis methodologies will be sufficient to determine land and water uses in the NCMA, sources of supply to meet those uses, groundwater availability, the amount and disposition of developed water supplies, and the amount and disposition of any other water supply sources within the NCMA. The approach and tabulation of results will be included in the Annual Report.

For preparation of the 2023 Annual Report, we intend to generally follow the established method that we have developed during the past several years for the NCMA monitoring program. In April 2016, however (for the 2015 Annual Report), we modified the approach to calculate applied irrigation for agricultural demand by developing a rigorous model using the Integrated Water Flow Model Demand Calculator (IDC). We believe that this methodology is much more representative of actual conditions because it accounts for specific climate conditions for the given year, soil properties specific to the area of interest, and the resulting spatial variation in evapotranspiration.

The NCMA has three major sources of water supply, which will be discussed and quantified in the 2023 Annual Report:

- **Lopez Reservoir.** All four municipalities in the NCMA receive water from Lopez Reservoir. We will compile data on the volume of the reservoir deliveries for each municipality and enter the data into the NCMA database.
- **State Water Project (SWP).** The City of Pismo Beach and Oceano CSD receive water from the SWP. Data on the volume of water delivered to these municipalities will be compiled in the NCMA database.
- **Groundwater.** NCMA records groundwater pumping data by location and volume. Non-urban domestic and agricultural groundwater pumping is estimated. These data will be compiled in the NCMA database.

Threats to Water Supply

Identified threats to NCMA's water supply include statewide and local drought, potential reduction in amounts or reliability of SWP deliveries, the potential for declining water in Lopez Reservoir caused by drought, and seawater intrusion.

Several factors can affect availability and quality of water supplies. To understand the threats, we will track several factors and incorporate the potential threats, as appropriate:

- Local environmental issues
- Groundwater production and pumping in the NMMA, with resultant implications of subsurface inflow into the NCMA
- Phased importation of supplemental supplies into the NMMA
- Land use changes

Task 1.7: 2023 NCMA Annual Report Preparation

Our first task related to the Annual Report preparation will be to prepare a schedule that details the monitoring events, meetings, report drafts, and final report submittal (as previously described in Task 1.1 of this proposal). This schedule will be submitted to the TG within 14 days of receiving the notice to proceed. Within 6 weeks of the NTP, we will prepare a draft outline of the 2023 Annual Report and submit it to the NCMA TG and the water rights counsel.

Building on our experience during the past 12 years, GSI will prepare an Administrative Draft Annual Report for the NCMA TG. The report will be based on data collected and analysis performed as described above, other data that may become available, and ongoing discussions with the NCMA TG and the NCMA project manager. The general outline of the Annual Report is expected to be:

- Executive Summary
- Introduction
- Basin Setting
 - Precipitation
 - Evapotranspiration
 - Geology and Hydrogeology
 - Groundwater Flow
- Groundwater Conditions
 - Groundwater Levels
 - Change in Groundwater in Storage
 - Water Quality
- Water Supply and Production/Delivery
 - Water Supply
 - Water Use
- Comparison of Water Supply v. Water Production
- Threats to Water Supply
- Management Activities

SGMA added a requirement to calculate change in groundwater in storage, effective with the submittal of the 2016 Annual Report. We will likely follow the same methodology used in the 2022 Annual Report, in which we analyzed water levels in the Alluvial Aquifer (occurring within the Cienega

Valley) separately from water levels in the Deep Aquifer (consisting of the Paso Robles Formation and the Careaga Sandstone). As the project progresses, we will continue to assess whether there are any additional data available and whether the calculation methodology can be improved (such as through use of the evolving Phase 1C groundwater flow model).

We recognize that other related information may be important to the NCMA TG, and we will incorporate additional information as appropriate.

We will send an electronic copy of the Administrative Draft Annual Report to the NCMA municipalities and water rights counsel at least 12 weeks before the submittal date of the Final Annual Report. All comments on the Administrative Draft will be noted and incorporated into the Draft Annual Report. In addition, a version with tracked changes will be provided to the TG to show the revisions that were made.

GSI will send an electronic copy of the Draft Annual Report to the NCMA TG 6 weeks before the submittal date of the Final Annual Report. As with the Administrative Draft Annual Report, we will compile all comments and incorporate them into the Final Annual Report. In addition, we will provide a version with tracked changes to the TG to show the modifications that were made.

Before April 30, 2024, we will deliver an electronic copy of the Final 2023 Annual Report to the NCMA TG and the water rights counsel. The water rights counsel then will be responsible for submitting the Annual Report to the Court.

Task 1.8: SGMA Report Preparation and Submittal

The RFP did not include this task; however, it is a necessary component of the annual reporting process, so we have included it both here and in the fee estimate. New in 2016 was an obligation to submit an online report and attendant data pursuant to the requirements of SGMA. As discussed earlier, the most significant impact that this requirement has on the normal NCMA reporting process is the need to calculate change in groundwater in storage. Additionally, the deadline for SGMA reporting is April 1 of each year, which is a full month earlier than the deadline to submit the Annual Report. We will take into account the SGMA reporting deadline when compiling and analyzing the Annual Report data. We will be responsible for submitting the data and complying with the SGMA reporting process by March 31, 2024, through the DWR website.

Schedule

Meeting the NCMA's schedule is a top priority for the GSI team. We have done so for the past 8 years without missing any of the deadlines, and we fully intend to continue that punctuality as we move forward. We will adhere strictly to the schedule outlined in the RFP through close management of the team and communication and coordination with the NCMA project manager, NCMA members, and the County of San Luis Obispo. Should any schedule deviation occur, the GSI team will address it immediately and convey a solution to the NCMA project manager.

A general schedule is outlined on the following page. We will provide a more detailed schedule of all tasks, anticipated meetings, and report preparation efforts within 14 days of the NTP, and we will prepare and submit a detailed report outline within 6 weeks of the NTP.

Event	Milestone/Work Product	Anticipated Date(s)
Notice to Proceed		Sept. 1, 2023
TG Meetings		Every 2 nd Monday of the month
Submittal to TG Committee	Detailed project schedule	Sept. 15, 2023
Submittal to TG Committee	Detailed draft report outline	Oct. 13, 2023
Groundwater Monitoring and Sampling Events	Data collection	Oct. 3-5, 2023
	Q4 report	Nov. 10, 2023
	Data collection	Jan. 2-4, 2024
	Q1 report	Feb. 9, 2024
	Data collection	Apr. 2-4, 2024
	Q2 report	May 10, 2024
	Data collection	July 2-4, 2024
	Q3 report	Aug. 9, 2024
NMAA and SMVWA coordination		TBD
Draft Water Level Contour Maps to TG	April 2023 and October 2023 water level contour maps	Jan. 1, 2024
Administrative Draft Annual Report	Admin. Draft to TG and water rights counsel	Feb. 2, 2024
	Comments back from TG	Feb. 23, 2024
Draft Annual Report	Draft to TG	Mar. 15, 2024
	Comments back from TG	Mar. 29, 2024
SGMA Report	Submit online SGMA report to DWR	Mar. 31, 2024
Final Annual Report	Final Annual Report submitted to TG and water rights counsel	Apr. 30, 2024

Fee Proposal

We will provide the services described above on a time and materials basis, with a **not-to-exceed base project fee of \$196,650**. The 2023 Annual Report project fee includes a nominal (~4%) increase over the 2022 Annual Report project costs. These costs are consistent and identical to the anticipated charges provided in the 2021 Annual Report Proposal, submitted in August 2021.

For the 2016 through 2022 Annual Report projects, the NCMA agencies opted to include an 8-10% technical contingency fee in addition to the base cost of the project work. These potential fees, which will only be charged if directly requested and authorized by the TG, cover out-of-scope fees such as transducer replacement, unexpected and extra consultation related to the adjudication litigation, and any additional requested hydrogeologic investigations and analyses. For 2023, we have suggested a technical contingency fee of \$17,700 (approximately 9% of base project fee). **The total project cost, including base project fee of \$196,650 plus technical contingency fee of \$17,700, will not exceed \$214,350.**

Please also note that, as mentioned earlier, Task 1.8 was not specified in the RFP as a required component of the work. If it is not to be included as a required task, then the total estimated fee is reduced by \$7,692.

The following tables provide a cost breakdown by task, as well as details about associated expenses. Further detail about our proposed fee is available upon request.

Description	Labor Costs		Expenses	Subtotal
	GSI	GEI		
Task 1.1: Groundwater Monitoring and Report Schedule	\$775	-	-	\$775
Task 1.2: Meetings	\$35,990	\$3,398	\$1,399	\$40,788
Task 1.3: Groundwater Monitoring and Water Quality Sampling	\$40,061	-	\$28,435	\$68,496
Task 1.4: Groundwater Data Analysis	\$16,963	-	-	\$16,963
Task 1.5: Hydrologic Data Compilation	\$3,925	\$7,405	-	\$11,330
Task 1.6: Water Demand and Availability Analysis	\$12,828	\$6,190	-	\$19,018
Task 1.7: Annual Report Preparation	\$28,823	\$2,428	-	\$31,251
Task 1.8: SGMA Report Preparation and Submittal	\$8,028	-	-	\$8,028
Subtotal	\$147,395	\$19,421	\$29,834	\$196,650
Technical Contingency Fee				\$17,700
Total Project Cost				\$214,350

Expense Details Per Task				
Task	Expenses	Rate	Quantity	Total
Task 1.2	Mileage	\$0.66/mile	1,780	\$1,175
Task 1.3	Water Quality Analysis	\$4,800/event	4	\$21,120 (includes 10% markup)
	Truck	\$150/day	12	\$1,800
	Generator and Pump Rental	\$800/event	4	\$3,519 (includes 10% markup)
	Field Crew per diem	\$185/day	12	\$2,220
			Total :	\$29,834

Note: No other tasks have associated expenses.

The cost of the work will be prorated among the NCMA group pursuant to the normal cost sharing agreement based on the fraction of groundwater allocation. The pro-rata basis for project fee cost-sharing is shown below:

	Base Project Fee	Contingency Fee	Total Project Fee (including contingency)	Fraction
Arroyo Grande	\$60,961.5	\$5,487	\$66,449	0.31
Grover Beach	\$62,928.0	\$5,664	\$68,592	0.32
Oceano CSD	\$41,296.5	\$3,717	\$45,014	0.21
Pismo Beach	\$31,464.0	\$2,832	\$34,296	0.16
Total	\$196,650	\$17,700	\$214,350	1.00