

Exhibit A

PROPOSAL: Northern Cities Management Area 2024–2026 Annual Monitoring Reports

Scope of Work

The following scope of work is based on the requirements in the RFP, as well as our experience preparing the annual reports and associated quarterly monitoring reports since 2016. 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: 2024 NCMA Annual Monitoring Report Preparation

Task 1.1: NCMA Groundwater Monitoring and Report Schedule

Assuming a Notice to Proceed (NTP) and authorization will be issued on or before September 27, 2024, 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 early October.

Task 1.2: Meetings

The NCMA TG holds monthly meetings to share data and results and foster collaboration. Mike McAlpin, GSI's proposed project manager, will participate in the regularly scheduled meetings; Dave O'Rourke will also attend most meetings and will attend in lieu of Mike if unavoidable conflicts arise. Mike and/or Dave will also participate in the SMGB Management Area Technical Subcommittee Meetings, as well as any other coordination meetings. As needed, Mike and/or Dave will work with the NCMA project manager to prepare agenda items and follow up on action items. 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 2024, January 2025, April 2025, and July 2025) 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 14 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 Eurofins Laboratory 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 wells, 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 wells
 - 12N/35W-32C03 (County Monitoring Well #3)
- Collect representative water samples from each of the 15 monitoring wells 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 Eurofins Laboratory. We will complete chain-of-custody documentation for all samples.

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 14 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 Index.¹

We will continue the collaborative efforts with the 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).

¹ 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 generally indicates that sufficient freshwater flow occurs from the east to the coastline to prevent seawater intrusion.

We will summarize 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 2024 will be summarized in the 2024 Annual Report.

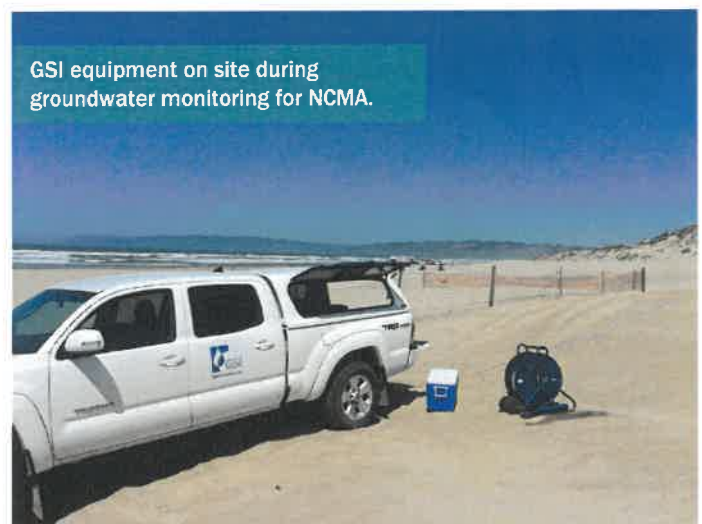
Task 1.5: Hydrologic Data Compilation

Several sets of hydrologic data are essential for the preparation of the report. We will use the methodology that we modified and adopted in 2015, which improved our understanding of and confidence in the rainfall and ET 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 2024 Annual Report.

For preparation of the 2024 Annual Report, we intend to generally follow the established method that we have developed during the past several years for the NCMA monitoring program. We will continue to calculate applied irrigation for agricultural demand by developing a rigorous model using the Integrated Water Flow Model Demand Calculator. The TG approved this method during review of the Phase 1B Groundwater Model agriculture pumping estimates. We believe that this methodology is 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 ET. GSI and GEI will evaluate recently installed irrigation wells in Arroyo Grande that are outfitted with meters to compare metered data with the model-derived estimates at a field scale.



The NCMA has three major sources of water supply, which will be discussed and quantified in the 2024 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. This 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: 2024 NCMA Annual Report Preparation

Within 6 weeks of the NTP, we will prepare a draft outline of the 2024 Annual Report and submit it to the NCMA TG and the water rights counsel.

Following approval of the outline, 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 vs. 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 2023 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 is 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 NCMA 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 NCMA TG to show the modifications that were made.

Before April 30, 2025, we will deliver an electronic copy of the Final 2024 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: DWR Reporting

GSI will prepare and submit all required monitoring and reporting data to DWR. As noted in the RFP, it is anticipated that reporting will occur through the new Adjudicated Basin Dashboard in the SGMA Portal. We will submit this data concurrently with the submittal of the Final 2024 Annual Report. GSI will attend one 2.5-hour virtual workshop with DWR and coordinate with DWR through the submittal process, making reasonable efforts to align data and reporting with the DWR guidance and best practices.

Task 2: 2025 NCMA Annual Monitoring Report Preparation

For the 2025 Annual Report, we propose to use the approach outlined in Tasks 1.1 through 1.8 above. We will review each specific task description with the NCMA project manager and the TG in June 2025 to incorporate any changes that would improve the quality of the evaluations or the efficiency of the process. For planning purposes, we expect the level of effort will be roughly equivalent to the current effort proposed for the 2024 Annual Report, plus any nominal cost-of-living increase as reflected in our fee schedule.

Task 3: 2026 NCMA Annual Monitoring Report Preparation

Similarly, we propose to use the approach outlined in Tasks 1.1 through 1.8 above for the 2026 Annual Report. We will review each specific task description with the NCMA project manager and the TG in June 2026 to incorporate any changes that would improve the quality of the evaluations or the efficiency of the process. For planning purposes, we expect the level of effort will be roughly equivalent to the 2025 Annual Report, plus any nominal cost-of-living increase as reflected in our fee schedule.

Optional Tasks: Preparation of the 2027 and 2028 NCMA Annual Reports

We appreciate the potential opportunity to continue to provide groundwater monitoring, water quality analysis, preparation of quarterly monitoring reports, annual reporting, and submittal of the SGMA reporting requirements to DWR, as well as to provide technical support services for the preparation of these future reports. We propose to use the approach outlined in Tasks 1.1 through 1.8 above for any future annual reports. We will review each specific task description with the NCMA project manager and the TG in June of each subsequent year to incorporate any changes that would improve the quality of the evaluations or the efficiency of the process. For planning purposes, we expect the level of effort in subsequent years will be roughly equivalent to the current effort proposed for the 2024 Annual Report, plus any nominal cost-of-living increase as reflected in our fee schedule.