

AGENDA

SPADRA BASIN GSA



SPECIAL EXECUTIVE COMMITTEE MEETING - **UPDATED**

<https://us05web.zoom.us/j/7725727300?pwd=eXFLUGxxczJSeDc1RU5BazlEVitDdz09&omn=82092006533>

Meeting ID: 772 572 7300

Passcode: 7Xv8qp

(Computer and Telephone Audio Accessible)

MONDAY, DECEMBER 4, 2023, AT 3:00 P.M.

Commissioner Nolte: 1305 W Holt Ave, #105, Pomona, CA 91768

Commissioner Tang: Walnut Valley Water District - 271 S. Brea Canyon Road, Walnut, CA 91789

Any member of the public wishing to make any comments to the Committee may do so by accessing the above-referenced link where they may select the option to join via webcam or teleconference. The meeting Chair will acknowledge such individual(s) at the appropriate time in the meeting prior to making his or her comment.

1. Call to Order and Pledge of Allegiance
2. Roll Call

Party	Representatives	Alternates
City of Pomona	___ John Nolte	___ Victor Preciado
Walnut Valley Water District	___ Jerry Tang	___ Theresa Lee
		___ Chris Diggs

3. Public Comment – The presiding officer of the Executive Committee may impose reasonable limitations on public comments to assure an orderly and timely meeting.
4. Consider Approval of Minutes for Meeting Held November 6, 2023
 - A. Discussion
 - B. Action Taken
5. Consider Approval of Proposal for Monitoring and Reporting Services – West Yost
 - A. Discussion
 - B. Action Taken
6. Future Discussion Items
7. Other
8. Adjournment to Next Meeting – Executive Committee on Monday, January 2, 2024 at 3:30 p.m.

**SPADRA BASIN GROUNDWATER SUSTAINABILITY AGENCY
EXECUTIVE COMMITTEE MEETING
Monday, November 6, 2023 – 3:30 P.M.**

**CONFERENCE CALL
MR. NOLTE: 1305 W HOLT #105, POMONA, CA 91768
MR. TANG: WALNUT VALLEY WATER DISTRICT,
271 S. BREA CANYON ROAD, WALNUT, CA 91789**

MINUTES

PRESENT:

John Nolte, President
Jerry Tang, Vice President
Theresa Lee, Alternate
Chris Diggs, Alternate

STAFF PRESENT:

Sherry Shaw, Administrative Officer
Jim Ciampa, Legal Counsel
Alexandra Cortez, Administrative Assistant

ABSENT:

Victor Preciado, Alternate

OTHERS IN ATTENDANCE:

Bob Bowcock
Erik Hitchman
Jared Macias
Josh Byerrum
Lauren Augino
Alanna Diaz
Chris Diggs
Damian Martinez

President Nolte called the meeting to order at 3:30 p.m.

ITEM 3: PUBLIC COMMENT

No comments were offered. (Item 3)

**ITEM 4: CONSIDER APPROVAL OF MINUTES FOR EXECUTIVE COMMITTEE MEETING
HELD SEPTEMBER 5, 2023**

- ◆ The Executive Committee was asked to approve the minutes for the Executive Committee meeting held on September 5, 2023.

Upon consideration thereof, it was moved by Mr. Tang, seconded by Mr. Nolte and unanimously carried (2-0), by the roll call vote noted below to approve the minutes of the Executive Committee meeting held September 5, 2023. (Item 4)

Ayes: Nolte and Tang

Noes: None

Abstain: None

ITEM 5: Consider Approval of Proposed 2024 Executive Committee Meeting Schedule

- ◆ Dates were incorrect on the provided staff report and were requested to be edited from 2023 to 2024 calendar year. (Item 5)

- ◆ The Executive Committee was asked to approve the proposed 2024 Meeting Schedule:
 - Tuesday, January 2, 2024
 - Monday, March 4, 2024
 - Monday, May 6, 2024
 - Monday, July 1, 2024
 - Tuesday, September 3, 2024
 - Monday, November 4, 2024

Upon consideration thereof, it was moved by Mr. Nolte, seconded by Mr. Tang and unanimously carried (2-0), by the roll call vote noted below to approve the proposed 2024 Meeting Schedule provided the year be changed to 2024. (Item 5)

Ayes: Nolte and Tang
Noes: None
Abstain: None

ITEM 6: FUTURE DISCUSSION ITEMS

- ◆ Project Update. (Item 6)
- ◆ West Yost proposal to prepare the annual report and monitoring data. (Item 6)

ITEM 7: OTHER

- ◆ No comments were offered. (Item 7)

ITEM 8: ADJOURNMENT – 3:37 P.M.

With no further discussion, the meeting was adjourned to the next Special Executive Committee meeting to be held December 4, 2023, at 3:00p.m. (Item 8)



23692 Birtcher Drive
Lake Forest CA 92630

949.420.3030 phone
530.756.5991 fax
westyost.com

November 29, 2023

SENT VIA: EMAIL

Sherry Shaw
Director of Engineering and Spadra Basin GSP Manager
Spadra Basin GSA c/o Walnut Valley Water District
271 South Brea Canyon Road
Walnut, CA 91789

SUBJECT: Proposal to Perform the Monitoring and Reporting Services for the Spadra Basin Groundwater Sustainability Plan for the Second Year of Implementation in 2024

Dear Sherry:

Thank you for the opportunity to submit this letter proposal to the Walnut Valley Water District (WVWD) on behalf of the Spadra Basin Groundwater Sustainability Agency (GSA) to perform monitoring and reporting services for the Spadra Basin Groundwater Sustainability Plan (GSP) during the second year of GSP implementation in 2024.

BACKGROUND AND PROJECT UNDERSTANDING

The Spadra Basin is a small, non-adjudicated subbasin of the San Gabriel Valley Basin (Basin No. 4-013) as defined by the California Department of Water Resources [DWR]. The DWR designated the San Gabriel Valley Basin and the subbasins within it as “very low-priority” basins; and as such, the 2014 Sustainable Groundwater Management Act (SGMA) does not require that a GSP be prepared for the basin. However, the SGMA Legislation “encourages and authorizes” basins designated as very low priority to be managed under a GSP (California Water Code § 10720.7(b)). In 2017, the WVWD and the City of Pomona (Pomona) collectively formed the Spadra Basin GSA and elected to prepare and adopt a GSP for the Spadra Basin in accordance with SGMA.

In 2019, the WVWD contracted with West Yost (formally Wildermuth Environmental Inc. [WEI]), to develop the GSP for the Spadra Basin. The GSP was developed over a 2.5-year process that encouraged all interested stakeholders and the public to participate in its development in an open and transparent process through the Spadra Basin Advisory Committee meetings. The final Spadra Basin GSP was completed in January 2022, adopted by the Spadra GSA on May 2, 2022, and submitted to the DWR via the SGMA Portal on July 26, 2022. On August 1, 2022, the DWR posted the GSP on the SGMA Portal and initiated the public comment period for 75 days. As of November 2023, the DWR has not submitted their review the GSP.

Pursuant to the GSP Regulations Title 23 California Code of Regulations (23 CCR) §354.32 Et seq., the GSA developed a GSP monitoring program described in *Section 4 Monitoring Program* of the GSP that is intended to collect data of sufficient quality, frequency, and distribution to characterize conditions in the basin and evaluate GSP implementation. The monitoring data is used to demonstrate groundwater and related surface water conditions in the Spadra Basin to evaluate conditions relative to the set Minimum Thresholds and Measurable Objectives to track sustainability of the basin. The monitoring program data will also be used to support the annual reporting requirements of SGMA and for five-year evaluations of the GSP.

SGMA regulations require that annual reports be submitted to the DWR by April 1 of each year following the adoption of the final GSP and include the following:

- General information about the basin,
- Graphics showing groundwater-elevation contours and well hydrographs,
- Table and map of groundwater pumping,
- Tables of surface water supplies and total water use within the basin,
- Map and time-history charts of change in storage,
- Description of progress made towards implementation of the GSP, and
- Monitoring data submitted electronically.

In late 2022, West Yost was contracted to set up the Spadra Basin GSP monitoring program, conduct monitoring for the first year of GSP implementation in 2023, and prepare and submit the first annual report for the Spadra Basin GSP for water year 2023.

This proposal describes the scope of services and cost estimate for West Yost to continue conducting GSP monitoring for the second year of GSP implementation in 2024, and prepare and submit the second annual report for the Spadra Basin GSP for water year 2023 (October 1, 2022 to September 30, 2023) to the DWR by April 1, 2024.

SCOPE OF SERVICES

The scope of services to perform the monitoring and reporting services includes the following tasks, each further described below:

- Task 1. Conduct the Monitoring Program
- Task 2. Prepare the Spadra Basin Annual Report for Water Year 2023
- Task 3. Project Management and Meetings

Task 1. Conduct Monitoring Program

The objective of this task is to conduct one-year of monitoring for the Spadra Basin GSP monitoring program from late-December 2023/early-January 2024 through December 2024.

The GSP Regulations 23 CCR §354.32 require that each GSA develop and maintain a data management system capable of storing and reporting data relevant to the GSP implementation and monitoring of the basin. All data collected for Task 1 will be uploaded and maintained in the data management system HydroDaVEsm. HydroDaVE is a relational database and graphical user interface that is used by West Yost to process, upload, check for QA/QC, store, view, analyze, and export data, which allows West Yost staff to develop work products with more efficiency and higher quality. HydroDaVE was used as the data management system during the development and implementation of the GSP.

Task 1.1. Monitoring of Groundwater Levels

The objective of this task is to conduct the groundwater level monitoring to support the GSP implementation. Groundwater level data is used to analyze basin-wide water level conditions, prepare groundwater elevation contours for spring and fall, and to evaluate against set Minimum Thresholds and Measurable Objectives to assess sustainability of groundwater levels and by proxy groundwater storage and land subsidence. Groundwater level monitoring program includes: i) downloading 15-minute data from the transducers installed at the 12 GSP monitoring wells listed in Table 1 below and ii) collecting all available water level measurements collected other wells in the Spadra Basin by various well owners/monitoring entities.

Table 1. GSP Monitoring Wells				
Well	Well Type	Well Owner	Representative Monitoring Site for WL ^(a)	Representative Monitoring Site for WQ ^(b)
Industry	Production	WVWD	X	X
CPP-4	Production	Cal Poly Pomona	X	X
CPP-3	Production	Cal Poly Pomona		
CPP-2 ^(c)	Production	Cal Poly Pomona		X
Valley	Monitoring	WVWD		
P-28	Production	City of Pomona	X	X
CPP-1	Production	Cal Poly Pomona	X	X
P-19	Production	City of Pomona	X	X
P-31	Production	City of Pomona		
OMW-3	Monitoring	Calsol Inc (Pomona) ^(a)	X	
MW-5	Monitoring	Calsol (Pomona) ^(a)	X	X
Spadra MW-1	Monitoring	Spadra GSA	TBD ^(b)	TBD ^(b)
<p>(a) Well is designated a representative monitoring site in the GSP with designated Minimum Thresholds and Measurable Objectives for the Sustainability Indicator of “chronic lowering of groundwater levels” (WL)</p> <p>(b) Well is designated a representative monitoring site in the GSP with designated Minimum Thresholds and Measurable Objectives for the Sustainability Indicator of “degraded water quality” (WQ)</p> <p>(c) Well CPP-2 was designated a GSP Monitoring Well in the GSP, however during field recon to set up the monitoring network it was discovered that there is no access down into the well to measure water levels.</p> <p>(d) This monitoring well is constructed for Calsol Inc. contaminant monitoring; monitoring data is collected by the City of Pomona</p> <p>(e) This monitoring well was constructed in late 2022, and monitoring began in December 2022. This well will be considered for inclusion as a representative monitoring site for water levels and water quality during the five-year GSP evaluation.</p>				

Quarterly field visits will be conducted to download the 15-minute data from the transducers at the GSP monitoring wells. During download, manual measurements of the depth-to-water will be collected with a precision sounder to ensure accuracy of the 15-minute data from the transducers. Following each quarterly download, the 15-minute data will be checked and processed. The raw data-logger files from the monitoring wells will be converted from pressure to depth-to-water based on the manual measurements collected in the field. The data will be checked for QA/QC and uploaded to HydroDaVE. There will be four quarterly downloads for the period January 2024 through December 2024. This task also includes any as-needed maintenance for transducers and direct read cables and replacement of equipment under warranty.

In addition to the high-frequency monitoring (transducers) at the GSP monitoring wells, all available depth-to-groundwater level measurements at the other wells in the Spadra Basin will be collected for data for water year 2023. These other wells are primarily dedicated monitoring wells for point-source contaminant monitoring at the Spadra Landfill and Calsol Inc. sites. This data will be requested from the various owners/monitoring entities one time in late-December 2023/early-January 2024. All data will be processed, checked for QA/QC and uploaded to HydroDaVE.

Task 1.2. Monitoring of Groundwater Quality

The objective of this task is to collect all water year 2023 data for the groundwater quality monitoring program to support the GSP implementation. Groundwater quality data is used to analyze basin-wide water level conditions, and to evaluate against set Minimum Thresholds and Measurable Objectives to assess sustainability related to groundwater quality. The groundwater quality monitoring program includes: i) the sampling and analyses at the 12 GSP monitoring wells in Table 1 at a minimum of once every three years by the well owners for the chemical analytes listed in Table 4-2 of the Spadra Basin GSP; and If well owners are unable to monitor for the recommended analytes and frequency desired by the GSA, then the GSA can opt to perform the monitoring; and ii) collecting all available water quality collected at other wells in the Spadra Basin by various well owners and/or monitoring entities.

All water quality data will be requested from the various well owners/monitoring entities one time in late-December 2023/early-January 2024 to request data for the water year 2023 period. The GSA will also coordinate with the well owners/monitoring entities to ensure that the GSP monitoring wells are able to be monitored for the analytes and frequency prescribed in the GSP Monitoring Program (Table 4-2 of the GSP), and if needed determine if the GSA will need to conduct the sampling in a subsequent year from this scope of services period.

Task 1.3. Monitoring of Groundwater Production

The objective of this task is to collect and compile water year 2023 groundwater production data for wells in the Spadra Basin. The production monitoring includes collecting the following from the well owners of the active production wells: i) monthly production volumes that are measured via flow meters maintained by the well owners; and ii) meter testing and calibration reports conducted by a California-licensed pump contractor to ensure meter accuracy. The groundwater production data is an internal reporting requirement for the SGMA Annual Reports.

Groundwater production in the Spadra Basin is measured via flow meters maintained by the well owners at all active production wells. These data are recorded by the well owners at a monthly frequency. All production data for water year 2023 will be collected from the well owners, checked for QA/QC, and uploaded to HydroDaVE.

All production data will be requested from the various well owners/monitoring entities one time in late-December 2023/early-January 2024 to request data for the water year 2023 period. All collected production data for water year 2023 will be processed, checked for QA/QC, and uploaded to HydroDaVE. The GSA will also coordinate with the well owners to ensure meter testing and calibration are performed every two years by a California-licensed pump contractor to ensure meter accuracy.

Task 1.4. Monitoring of Surface Water

The objective of this task is to collect and compile surface-water discharge and quality data from the Los Angeles County Sanitations Districts (LACSD) for two stations along South San Jose Creek in the Spadra Basin: the Pomona Water Reclamation Plant (WRP) effluent discharge and the downstream monitoring location RSW-001D.

The Pomona WRP effluent discharge is a portion of the flow in South San Jose Creek, and the RSW-001 monitoring location is representative of flow in the channel downstream of the effluent discharge. These data are recorded by LACSD and made available on the California Integrated Water Quality System Project (CIWQS) website. All data for water year 2023 will be downloaded from CIWQS, processed, checked for QA/QC, and uploaded to HydroDaVE.

Task 1.5. Continue Set up of Well Monitoring Network

In 2023 a well canvas was performed to identify unknown private wells or monitoring wells in the basin, and work with well owners for inclusion in the GSP monitoring program. In this task West Yost will continue to follow up with the potential well location leads as needed and consider the need to include these wells in the monitoring network for the Spadra Basin GSP.

Task 2. Prepare the Spadra Basin GSP Annual Report for 2023

The objective of this task is to prepare the second Spadra Basin GSP Annual Report for water year 2023 and the required corresponding data submittals. Pursuant to 23 CCR § 356.2 of the GSP Regulations, the annual report will include the following:

- General information, including an executive summary and a location map depicting the area covered by the report.
- Groundwater elevation data from wells in the monitoring network, including:
 - Groundwater elevation contour maps illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.
 - Hydrographs of groundwater elevations for a historical period through the current reporting year.
- Groundwater extraction, including:
 - A table that summarizes groundwater extractions by water use sector and identifies the method of measurement (direct or estimate) and accuracy of measurements.
 - Map that illustrates the location and volume of groundwater extractions.
- Annual volume of surface water supply used, or available for use, for groundwater recharge or in-lieu use.
- Annual volumes of total water use in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements.
- Annual change in groundwater in storage, including:
 - Change in groundwater in storage maps.
 - Graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for a historical period through the current reporting year.
- A description of progress towards implementing the GSP, including achieving Interim Milestones, and implementation of projects or management actions since the previous annual report.

The following subtasks necessary to prepare the Annual Report are listed and described below:

- Task 2.1. Compile Data for the Annual Report
- Task 2.2. Prepare Maps, Tables, and Data Graphics
- Task 2.3. Prepare the 2023 Annual Report and Data Submittals

Task 2.1. Compile Data for the Annual Report

The objective of this task is to obtain the data required to prepare the annual report and data submittals that are not already collected in Task 1. The following data are required to prepare the annual report and submittals: groundwater elevation, groundwater pumping, groundwater quality, precipitation, surface water, and water use. All required data except precipitation and water use are collected in Task 1.

In this task West Yost will coordinate with the Spadra Basin water purveyors in late-December 2023/early-January 2024 to collect the monthly water use data for water year 2023. Monthly precipitation estimates from the PRISM Climate group¹ gridded data (an 800-meter by 800-meter grid) will be collected and computed as a spatial average across the hydrologic area of Spadra Basin (shown in Figure 2-8 of the GSP) for water year 2023.

Task 2.2. Prepare Maps, Tables, and Data Graphics

The objective of this task is to prepare all the maps, charts, and data graphics required in the GSP annual reporting for water year 2023. The following list all the maps, charts, and data graphics that will be included in the annual report:

- Map of location covered by report
- Map of the monitoring program
- Graphic depicting annual precipitation and a cumulative departure from the mean precipitation plot
- Table of monthly groundwater pumping for water year 2023
- Map of groundwater pumping for water year 2023
- Maps of groundwater elevation contours for fall 2022 and spring 2023
- Hydrographs of groundwater elevations and water year type through water year 2023
- Map of change in groundwater storage from water year 2022 to 2023
- Graphic depicting water year type, groundwater use, the annual change in groundwater storage, and cumulative change in groundwater in storage for the basin, from 2015 to current year (2023)
- Table of annual volumes of surface water supply used or available for use for groundwater recharge or in-lieu use for water year 2023
- Table of annual volumes total water use for water year 2023
- Graphics that show the monitoring data at the representative monitoring wells in relation to Sustainable Management Criteria

¹ [PRISM Climate Group, Oregon State U](https://prismclimate.org/)

The preparation of the groundwater elevation contours and change in storage volumes will use specific methods:

- Groundwater elevation contours for fall 2022 and spring 2023, will be prepared by selecting representative groundwater elevation measurement at wells in Spadra Basin for each target period, and using the selected measurements to generate a raster-grid of the groundwater surface elevation using Topo to Raster interpolation function in ArcMap. The raster used to generate groundwater elevation contours which will be reviewed and clipped at the basin and/or model boundaries.
- The annual and cumulative change in storage volumes for water year 2023 will be estimated with the Spadra Basin Groundwater Model that was developed and calibrated for the GSP. During the development of the GSP, the model was used to prepare a water budget for a historical period of 1978 through 2018, and a projected period of 2019 through 2079 for a Baseline Scenario. To estimate a change in storage for water year 2023, the projected pumping will be replaced with actual pumping for the last water year (October 2022 to September 2023), and recharge² to the basin will be estimated based on the actual precipitation through water year 2023. The model calibration period will be extended through water year 2023 and re-run with updated pumping and recharge values and produce a water budget to determine the annual and cumulative change in storage through water year 2023.

Task 2.3. Prepare the 2023 Annual Report and Data Submittals

The objective of this task is to prepare the Spadra Basin GSP Annual Report for water year 2023 in compliance with all SGMA requirements and prepare all the required data submittals. The report will include the required Annual Report Elements Guide (Attachment A) – which is a required table mapping the SGMA annual report requirements to the sections, tables, and figures in the report. Per the Elements Guide and the first Annual Report submitted for water year 2022 the report sections include:

Executive Summary

Section 1 – Introduction.

Section 2 – Basin Conditions.

Section 3 – Water Use.

Section 4 – GSP Implementation and Progress.

A draft annual report will be prepared and submitted to the Spadra Basin GSA for review. All comments and feedback on the draft report will be incorporated and a final report will be prepared to submit to the DWR by April 1, 2024.

² Recharge to the Spadra Basin occurs from the deep infiltration of precipitation and applied water (DIPAW) and subsurface inflow from the saturated alluvium and fractures within the bordering bedrock hills (San Jose and Puente Hills). There is no managed aquifer recharge. DIPAW and subsurface inflow is determined using the HDPF and R4 watershed models (see the GSP Appendix I describing the Spadra Basin Groundwater Model construction and calibration). These models will be re-run with actual precipitation data to determine DIPAW and subsurface inflow recharge components for the Spadra Basin.

West Yost will also prepare and provide all the necessary data files and input that is required to be submitted for the annual report via the DWR's.

https://sgma.water.ca.gov/portal/resources/data/gsp_annualreport/public/GSP%20Annual%20Reportin%20Module%20User%20Manual.pdf. This includes Microsoft Excel files³ of groundwater level, groundwater pumping, surface water supply, and total water use data for water year 2023 (Parts A through D of the Report Module); and includes the required information on change in storage, the monitoring network, and annual report (Parts E through G of the Report Module).

Task 2 Deliverables

- West Yost will provide a draft Spadra Basin GSP Annual Report for 2023.
- West Yost will provide a final Spadra Basin GSP Annual Report for 2023.
- West Yost will provide an Excel Files in the DWR's required format of groundwater level, groundwater pumping, surface water supply, and total water use data for water year 2023.

Task 3. Project Management and Ad Hoc Meetings

In this task, West Yost will: set up project management tools at initiation of project; coordinate staffing and progress over the duration of the project; provide monthly invoices to WVWD staff of project progress and budget status; and prepare for and conduct up to two virtual meetings to coordinate with the Spadra Basin GSA staff or committees and present information on progress and deliverables.

PROJECT BUDGET

West Yost's proposed level of effort and fee for each of the tasks and subtasks described for the scope of services above is shown in Table 2 (Attachment B) with a not-to-exceed budget of \$109,571. Table 3 summarizes the cost by major task.

Table 3. Summary of Labor, Other Expenses and Total Fee by Task			
Task	Labor Fee, dollars	Other Expenses, dollars	Total Fee, dollars
Task 1. Conduct the Monitoring Program	45,516	1,058	46,574
Task 2. Prepare the Spadra Basin GSP Annual Report for 2023	49,307	0	49,307
Task 3. Project Management and Ad Hoc Meetings	13,690	0	13,690
Total:			\$109,571

The services will be billed on a time-and-materials basis at the billing rates set forth in West Yost's attached 2024 Billing Rate Schedule (Attachment C).

³ The DWR requires data be uploaded to the GSP Annual Report Module using standardized Microsoft Excel templates.

PROJECT SCHEDULE

Table 4 is a schedule for the monitoring and reporting for the Spadra Basin GSP for the first year of GSP implementation, showing the estimated timeline for Tasks 1 through Task 3, and sub tasks over the scope of services period approximately December 2023 through December 2024.

Table 4. Schedule for Spadra Basin GSP Monitoring and Report for the Second Year in 2024													
Task	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24	Sep 24	Oct 24	Nov 24	Dec 24
Task 1. Conduct Monitoring Program													
1.1 Monitoring of Groundwater Levels - Collection													
1.1 Monitoring of Groundwater Levels - Quarterly Downloads													
1.2 Monitoring of Groundwater Quality													
1.3 Monitoring of Groundwater Production													
1.4 Monitoring of Surface Water													
Task 2. Prepare the Spadra Basin GSP Annual Report for 2023													
2.1 Compile Data for the Annual Report													
2.2 Prepare Maps, Tables, and Graphics													
2.3 Prepare Annual Report and Data Submittals													
Task 3. Project Management and Ad Hoc Meetings													
3.1 Project Management													
3.2 Ad-hoc GSA Meetings													

STAFFING

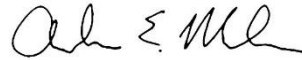
Veva Weamer will serve as the lead scientist and project manager and will be responsible for implementing the project per the final approved scope and budget. Ms. Weamer will be supported by West Yost geologists, engineers, and scientists for the implementation of the scope of services. Andy Malone will serve as the technical reviewer and will provide technical support to the project team and QA/QC of all project deliverables.

We appreciate the opportunity to submit this proposal to be of continued service to the WVWD and Spadra Basin GSA in your efforts to maximize the beneficial use of local water supplies. Please call if you would like to discuss any portion of this proposal or if you require additional information.

Sincerely,
WEST YOST



Veva Weamer
Principal Scientist I



Andy E. Malone, PG
Principal Geologist

cc: Erik Hitchman, Walnut Valley Water District
Jared Macias, Walnut Valley Water District

Attachment(s): A. Annual Report Elements Guide
B. Table 2. Line-Item Fee Estimate
C. West Yost 2024 Billing Rate Schedule



Attachment A

Annual Report Elements Guide

Groundwater Sustainability Plan Annual Report Elements Guide

Basin Name			
GSP Local ID			
California Code of Regulations - GSP Regulation Sections	Groundwater Sustainability Plan Elements	Document page number(s) that address the applicable GSP element.	Notes: Briefly describe the GSP element does not apply.
Article 5	Plan Contents		
Subarticle 4	Monitoring Networks		
§ 354.40	Reporting Monitoring Data to the Department		
	Monitoring data shall be stored in the data management system developed pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department.		
	Note: Authority cited: Section 10733.2, Water Code. Reference: Sections 10728, 10728.2, 10733.2 and 10733.8, Water Code.		
Article 7	Annual Reports and Periodic Evaluations by the Agency		
§ 356.2	Annual Reports		
	Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:		
	(a) General information, including an executive summary and a location map depicting the basin covered by the report.		
	(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:		
	(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:		
	(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.		
	(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.		
	(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.		
	(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.		
	(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.		
	(5) Change in groundwater in storage shall include the following:		
	(A) Change in groundwater in storage maps for each principal aquifer in the basin.		
	(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.		
	(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.		

Table 2. Line-Item Fee Estimate

Table 2. Line-Item Fee Estimate to Perform the Monitoring and Reporting Services for the Spadra Basin Groundwater Sustainability Plan for the First Year of GSP Implementation																					
Task and Subtask Descriptions		Labor, days and dollars											Other Direct Expenses dollars				Total Costs dollars				
		Principal Engineer/Geologist II	Principal Scientist I	Associate Scientist/Engineer II	Scientist/Engineer II	Scientist/Engineer I	Field Services	Administrative IV	Task Repetition Multiplier	Total Person Days	Labor Cost Totals dollars			Travel	Equipment	Total		Sub-Task 2	Sub-Task 1 Task, and Project		
											Sub-Task 2	Sub-Task 1	Task			Sub-Task 2	Sub-Task 1 and Task				
Task 1. Conduct Monitoring Program		28.2											\$45,516			\$1,058				\$46,574	
1.1	Monitoring of Groundwater Levels							1	22.0		\$34,526						\$1,058		\$35,474		
	Quarterly downloads of transducers at the 12 GSP monitoring wells; QA/QC, and upload in HydroDaVE data management system		0.40		1.75		2.00		5	20.8	\$32,282			\$618	\$330	\$948		\$33,230			
	Collection of all groundwater level measurements at all wells in the basin through water year 2022; and process, QA/QC, and upload into HydroDaVE data management system		0.25		1.00			1	1.3		\$2,244					\$0		\$2,244			
1.2	Monitoring of Groundwater Quality		0.50		1.00			1	1.5		\$2,848					\$0			\$2,848		
1.2	Monitoring of Groundwater Production		0.25		1.00			1	1.3		\$2,244					\$0			\$2,244		
1.4	Monitoring of Surface Water		0.40		1.00			1	1.4		\$2,606					\$0			\$2,606		
1.5	Continue set up of Monitoring Network		0.25		1.00		0.80	1	2.1		\$3,292			\$110		\$110			\$3,292		
Task 2. Prepare the Spadra Basin GSP Annual Report for 2023		25.2											\$49,307			\$0				\$49,307	
2.1	Compile Data for the Annual Report		0.30		1.25			1	1.6		\$2,775						\$0		\$2,775		
2.2	Prepare Maps, Tables, and Data Graphics							1	14.8		\$28,738						\$0		\$28,738		
	Prepare maps on location and monitoring program, and graphic depicting precipitation and water year type		0.10	0.50				1	0.6	\$1,214						\$0					
	Prepare map and table on groundwater pumping		0.20		0.75			1	1.0	\$1,713						\$0					
	Develop spring 2023 and fall 2022 groundwater elevation contours and prepare maps	0.75	0.25		2.00			1	3.0	\$5,816						\$0					
	Develop Hydrographs for 12 GSP Monitoring Wells		0.25	0.75				1	1.0	\$2,062						\$0		\$0			
	Estimate water year change in storage through 2023, and prepare graphic showing annual and cumulative change in storage, groundwater pumping, and water year type		0.75	2.25	1.25			1	4.3	\$8,236						\$0		\$0			
	Estimate spatial change in storage for water year 2022 to 2023 and prepare map	0.25	0.50	0.50	1.00			1	2.3	\$4,464						\$0		\$0			
	Prepare tables of annual surface water and water use for water year 2023		0.20		0.25			1	0.5	\$893						\$0					
	Prepare graphics of monitoring data in relation to Sustainable Management Criteria		0.25	1.50	0.50			1	2.3	\$4,340						\$0		\$0			
2.3	Prepare the 2023 Annual Report and Data Submittals							1	8.9		\$17,794						\$0		\$17,794		
	Prepare Draft Report	0.50	2.00		2.25		0.75	1	5.5	\$10,770						\$0		\$0			
	Prepare Final Report	0.25	1.00		0.50		0.40	1	2.2	\$4,392						\$0		\$0			
	Prepare data files and other submittals for the Annual Report		0.75		0.50			1	1.3	\$2,632						\$0		\$0			
Task 3. Project Management and Ad Hoc Meetings		5.6											\$13,690			\$0				\$13,690	
3.1	Project Management		0.20					13	2.6		\$6,282						\$0	\$6,282			
3.2	Ad-hoc GSA Meetings	0.50	1.00					2	3.0		\$7,408						\$0	\$7,408			
Project Totals		2	9	6	17	0	3	1	57.8			\$108,513					\$1,058		\$109,571		



Attachment C

West Yost's 2024 Billing Rate Schedule

2024 Billing Rate Schedule

(Effective January 1, 2024, through December 31, 2024)*



POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	\$355
Engineer/Scientist/Geologist Manager I / II	\$335 / \$351
Principal Engineer/Scientist/Geologist I / II	\$302 / \$322
Senior Engineer/Scientist/Geologist I / II	\$272 / \$286
Associate Engineer/Scientist/Geologist I / II	\$226 / \$243
Engineer/Scientist/Geologist I / II	\$176 / \$205
Engineering Aide	\$106
Field Monitoring Services	\$131
Administrative I / II / III / IV	\$97 / \$121 / \$145 / \$160
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	\$349 / \$351
Principal Tech Specialist I / II	\$320 / \$331
Senior Tech Specialist I / II	\$293 / \$306
Senior GIS Analyst	\$265
GIS Analyst	\$251
Technical Specialist I / II / III / IV	\$187 / \$213 / \$239 / \$267
Technical Analyst I / II	\$134 / \$160
Technical Analyst Intern	\$108
Cross-Connection Control Specialist I / II / III / IV	\$140 / \$151 / \$170 / \$189
CAD Manager	\$211
CAD Designer I / II	\$164 / \$185
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	\$338
Construction Manager I / II / III / IV	\$201 / \$215 / \$228 / \$289
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$181 / \$201 / \$224 / \$232
Apprentice Inspector	\$164
CM Administrative I / II	\$87 / \$118
Field Services	\$232

- Hourly rates include charges for technology and communication, such as general and CAD computer software, telephone calls, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside services, such as vendor reproductions, prints, and shipping; major West Yost reproduction efforts; as well as engineering supplies, etc., will be billed at the actual cost plus 15%.
- The Federal Mileage Rate will be used for mileage charges and will be based on the Federal Mileage Rate applicable to when the mileage costs were incurred. Travel other than mileage will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness services, research, technical review, analysis, preparation, and meetings will be billed at 150% of standard hourly rates. Expert witness testimony and depositions will be billed at 200% of standard hourly rates.
- A finance charge of 1.5% per month (an annual rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

2024 Billing Rate Schedule

(Effective January 1, 2024, through December 31, 2024)*

Equipment Charges

EQUIPMENT	BILLING RATES
2" Purge Pump & Control Box	\$300 / day
Aquacalc / Pygmy or AA Flow Meter	\$28 / day
Emergency SCADA System	\$35 / day
Field Vehicles (Groundwater)	\$1.02 / mile
Gas Detector	\$80 / day
Generator	\$60 / day
Hydrant Pressure Gauge	\$10 / day
Hydrant Pressure Recorder, Impulse (Transient)	\$55 / day
Hydrant Pressure Recorder, Standard	\$40 / day
Low Flow Pump Back Pack	\$135 / day
Low Flow Pump Controller	\$200 / day
Powers Water Level Meter	\$32 / day
Precision Water Level Meter 300ft	\$30 / day
Precision Water Level Meter 500ft	\$40 / day
Precision Water Level Meter 700ft	\$45 / day
QED Sample Pro Bladder Pump	\$65 / day
Storage Tank	\$20 / day
Sump Pump	\$24 / day
Transducer Communications Cable	\$10 / day
Transducer Components (per installation)	\$23 / day
Trimble GPS – Geo 7x	\$220 / day
Tube Length Counter	\$22 / day
Turbidity Meter	\$30 / day
Turbidity Meter (2100Q Portable)	\$35 / day
Vehicle (Construction Management)	\$10 / hour
Water Flow Probe Meter	\$20 / day
Water Quality Meter	\$50 / day
Water Quality Multimeter	\$185 / day
Well Sounder	\$30 / day