

# AGENDA

## SPADRA BASIN GSA



### EXECUTIVE COMMITTEE MEETING CONFERENCE CALL

**WEDNESDAY, SEPTEMBER 14, 2022, AT 3:00 P.M.**

Pursuant to the provisions of Government Code Section 54953(e), as amended by AB 361, any Executive Committee member and any member of the public who desires to participate in the open session items of this meeting may do so by accessing the Webex link below without otherwise complying with the Brown Act's teleconference requirements.

<https://www.webex.com/meet/spadra2>  
(Computer and Telephone Audio Accessible)

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

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 Resolution No. 2022-09-14 Authorizing Executive Committee and Advisory Committee Meetings to Continue to be Conducted by Teleconference and Making Related Findings
  - A. Discussion
  - B. Action Taken
5. Consider Approval of Minutes for Meeting Held May 2, 2022
  - A. Discussion
  - B. Action Taken
6. Update on Monitoring Well and Groundwater Sustainability Plan
  - Consider Approval of Proposal for Monitoring and Reporting Services – West Yost
    - A. Discussion
    - B. Action Taken
7. Future Discussion Items
8. Other
  - Staff Change – Introducing Carmen Fleming
9. Adjournment to Next Meeting – Executive Committee on Monday, November 7th at 3:30 p.m.  
(Next Advisory Committee Meeting: Monday, October 3rd at 3:00 p.m.)

RESOLUTION NO. 2022-09-14 (SUBSEQUENT)

A RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE SPADRA BASIN GROUNDWATER SUSTAINABILITY AGENCY PROCLAIMING A STATE OF EMERGENCY PERSISTS, RE-RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY GOVERNOR GAVIN NEWSOM, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE EXECUTIVE COMMITTEE FOR THE PERIOD SEPTEMBER 15, 2022 TO OCTOBER 14, 2022 PURSUANT TO BROWN ACT PROVISIONS.

WHEREAS, the Spadra Basin Groundwater Sustainability Agency (the “GSA”) is committed to preserving and nurturing public access and participation in meetings of its Executive Committee; and

WHEREAS, all meetings of the GSA’s Executive Committee and its standing committees are open and public, as required by the Ralph M. Brown Act (California Government Code Sections 54950 – 54963), so that any member of the public may attend, participate, and watch those bodies conduct their business; and

WHEREAS, the Brown Act, in Government Code Section 54953(e), makes provision for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code Section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition for application of Section 54953(e) is that a state of emergency is declared by the Governor pursuant to Government Code Section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code Section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District’s boundaries, caused by natural, technological or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist in the GSA, specifically, COVID-19, and its Delta variant, remain highly contagious and, therefore, a threat to the health, safety and well-being of the GSA’s employees, directors, vendors, contractors, customers and residents; and

WHEREAS, orders from the Los Angeles County Department of Public Health and regulations from the State of California impose limitations on gatherings and provide guidance on best practices with respect to actions to reduce the spread of COVID-19; and

WHEREAS, the GSA’s Executive Committee does hereby find that a state of emergency exists within the GSA’s service area as a result of the continuing presence of COVID-19 and resulting local, state and federal orders and guidance, which has caused, and will continue to cause, conditions of peril to the safety of persons within the GSA that are likely to be beyond the control of services, personnel, equipment, and facilities of the GSA, and the Executive Committee desires to affirm a local emergency exists and ratify the proclamation of state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the local emergency, the Executive Committee does hereby find that the GSA’s Executive Committee and all standing committees shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code Section 54953, as authorized by subdivision (e) of Section 54953, and that such legislative bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of Section 54953; and

WHEREAS, the GSA will continue to provide proper notice to the public regarding all GSA Executive Committee and standing committee meetings, in accordance with Government Code Section 54953(e)(2)(A) and shall provide notice to the public of how they may access any such meeting via call-in number and/or internet link.

NOW, THEREFORE, THE EXECUTIVE COMMITTEE OF THE SPADRA BASIN GROUNDWATER SUSTAINABILITY AGENCY DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Proclamation Regarding Local Emergency. The Executive Committee hereby considers the conditions of the state of emergency in the GSA and proclaims that a local emergency now exists throughout the GSA, and that conducting GSA Executive Committee and standing committee meetings virtually will minimize the possible spread COVID-19 and any variant thereof.

Section 3. Ratification of Governor’s Proclamation of a State of Emergency. The Executive Committee hereby ratifies the Governor of the State of California’s Proclamation of State of Emergency regarding COVID-19, dated March 4, 2020.

Section 4. Remote Teleconference Meetings. The GSA’s Administrative Officer, or his or her delegee, and the Executive Committee and standing committees of the GSA are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, continuing to conduct open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) the expiration of thirty (30) days from the date this Resolution was adopted, as set forth below, or (ii) such time as the Executive Committee adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the Executive Committee and standing committees of the GSA may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the Executive Committee of the Spadra Basin Groundwater Sustainability Agency this 14th day of September, 2022, by the following vote:

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

SPADRA BASIN GROUNDWATER SUSTAINABILITY  
AGENCY

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Jerry Tang, President

ATTEST:

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Sheryl Shaw, Secretary

**SPADRA BASIN GROUNDWATER SUSTAINABILITY AGENCY  
PUBLIC HEARING AND EXECUTIVE COMMITTEE MEETING  
Monday, May 2, 2022 – 3:30 P.M.**

**CONFERENCE CALL**

**MINUTES**

**PRESENT:**

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

**STAFF PRESENT:**

Sherry Shaw, Administrative Officer  
Jim Ciampa, Legal Counsel

**ABSENT:**

Victor Preciado, Alternate

**OTHERS IN ATTENDANCE:**

Bob Bowcock  
Josh Byerrum  
Chris Diggs  
Donna DiLaura  
Carmen Fleming  
Carlos Goytia  
Clint Granath  
Rick Hansen  
Earl Hartling  
Kevin Hayakawa  
Jared Macias  
Damian Martinez  
John Mendoza  
Dusty Moisio  
Wes Rezk  
Jody Roberto  
Veva Weamer  
Robert Wong

President Tang 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 RESOLUTION NO. 2022-05-02 AUTHORIZING EXECUTIVE COMMITTEE AND ADVISORY COMMITTEE MEETINGS TO CONTINUE TO BE CONDUCTED BY TELECONFERENCE AND MAKING RELATED FINDINGS**

- ◆ The Executive Committee was asked to approve and adopt Resolution No. 2022-05-02 authorizing Executive and Advisory Committee meetings to continue to be conducted by teleconference and making related findings.

*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 and adopt Resolution No. 2022-05-02 authorizing Executive and Advisory Committee meetings to continue to be conducted by teleconference and making related findings. (Item 4)*

***Ayes: Tang and Nolte***

***Noes: None***

***Absent: None***

***Abstain: None***

**ITEM 5: PUBLIC HEARING: RECEIVE PUBLIC INPUT AND FEEDBACK REGARDING THE SPADRA BASIN GROUNDWATER SUSTAINABILITY PLAN**

- ◆ President Tang opened the public hearing to receive comments regarding the approval of the Spadra Basin Groundwater Sustainability Plan (Plan). (Item 5-A)
- ◆ Staff and Consultant provided a general overview of the Plan and its preparation, and information on the process of submitting the plan to the Department of Water Resources. (Item 5-B)
- ◆ Ms. Weamer was present to respond to public comments; however, none were received. (Item 5-C)
- ◆ President Tang then closed the public hearing. (Item 5-D)

*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 open the Public Hearing to*

**receive public input and feedback regarding Approval of the Spadra Basin Groundwater Sustainability Plan (Item 5-A)**

**Ayes: Nolte and Tang**  
**Noes: None**  
**Absent: None**  
**Abstain: None**

A public hearing was conducted and no public comments were received.

**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 close the Public Hearing to receive public input and feedback regarding Approval of the Spadra Basin Groundwater Sustainability Plan (Item 5-D)**

**Ayes: Nolte and Tang**  
**Noes: None**  
**Absent: None**  
**Abstain: None**

**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 Spadra Basin Final Groundwater Sustainability Plan (Item 5-E)**

**Ayes: Nolte and Tang**  
**Noes: None**  
**Absent: None**  
**Abstain: None**

#### **ITEM 6: CONSIDER APPROVAL OF MINUTES FOR MEETING HELD MARCH 7, 2022**

- ♦ The Executive Committee was asked to approve the minutes for the Executive Committee meeting held on March 7, 2022.

**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 minutes of the March 7, 2022 Executive Committee meeting. (Item 6)**

**Ayes: Nolte and Tang**  
**Noes: None**  
**Absent: None**  
**Abstain: None**

#### **ITEM 7: APPROVAL OF FISCAL YEAR 2022-23 BUDGET**

- ♦ The Executive Committee was asked to approve the Fiscal Year 2022-23 Budget as presented.

**Upon consideration thereof, it was moved by Mr. Tang, seconded by Mr. Nolte and unanimously carried (2-0), by the roll call voted noted below to approve the Fiscal Year 2022-23 Budget as presented. (Item 7)**

**Ayes: Tang and Nolte**  
**Noes: None**  
**Absent: None**  
**Abstain: None**

#### **ITEM 8: UPDATE ON MONITORING WELL**

- ♦ Ms. Shaw reported that the contractor, Yellow Jacket Drilling, is in the submittal process with West Yost. Drilling is expected to start on May 31, 2022 (Item 8)

#### **ITEM 9: FUTURE DISCUSSION ITEMS**

- ♦ None to report. (Item 9)
- ♦ Mr. Bowcock thanked staff for their efforts. He noted that there is a tremendous amount of work involved in the management of the Groundwater Sustainability Agency (GSA), including the preparation of the Groundwater Sustainability Plan. Mr. Bowcock stated that the Spadra Basin group is one of the best GSA's.
- ♦ President Tang also thanked staff, the West Yost team and Jim Ciampa. He also thanked Three Valley Municipal Water District for funding the monitoring well project.

#### **ITEM 10: ADJOURNMENT – 3:51 P.M.**

**Upon consideration thereof, by consensus, it was moved by Mr. Tang, seconded by Mr. Nolte and unanimously carried (2-0), to adjourn to the next meeting on July 5, 2022. (Item 11)**



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September 7, 2022

SENT VIA: EMAIL

Sherry Shaw  
Director of Engineering and Spadra Basin GSP Manager  
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 First Year of GSP Implementation**

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 first year of GSP implementation.

## **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. West Yost prepared five (5) sequential technical memorandums (TMs) that were interim milestones in the development of the GSP that were presented at Spadra Basin Advisory Committee meetings. Spadra Basin stakeholders and the public had a review period to provide comments and suggested edits on all GSP TMs. The draft GSP had the same review process and 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. Following the public comment period, the DWR will initiate their review of 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. The final GSP for the Spadra Basin was adopted in May 2022, hence the first annual report is to be submitted by April 1, 2023. Annual reporting requirements include the preparation and submittal of an annual report that includes specific requirements, and electronic data deliverables (see Attachment A. Annual Report Elements Guide). Pursuant to the 23 CCR §354.40 and §356.2, the annual report must 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.

This proposal describes the scope of services and cost estimate for West Yost to set up the Spadra Basin GSP monitoring program, conduct monitoring for the first year of GSP implementation, and prepare the first annual report for the Spadra Basin GSP for water year 2022 (October 1, 2021 to September 30, 2022), and submit the annual report and data deliverables to the DWR by April 1, 2023.

## **SCOPE OF SERVICES**

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

- Task 1. Setup and Conduct the Monitoring Program for the First Year
- Task 2. Prepare the Spadra Basin Annual Report for Water Year 2022
- Task 3. Project Management and Meetings

### **Task 1. Setup and Conduct Monitoring Program for the First Year**

The objective of this task is to set up the GSP monitoring network described in Section 4 of the Spadra Basin GSP and conduct one-year of monitoring from November 2022 through October 2023.

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. Data collected for Task 1 and Task 2 will be uploaded and maintained in the data management system HydroDaVE<sup>sm</sup>. 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 of the GSP.

### ***Task 1.1. Set up and Maintenance of the Monitoring Network***

The objective of this task is to set up the monitoring network at 12 wells for the monitoring of groundwater levels and groundwater quality (termed GSP monitoring wells). This includes coordination with well owners, conducting well site visits, purchase and install transducers to measure and record groundwater elevations; upload/update well information in HydroDaVE, and follow-up to ensure that the transducers are working properly. Table 1 below lists the 12 GSP monitoring wells and identifies those wells that are “representative monitoring sites” for the Sustainability Indicators of chronic lowering of groundwater levels (WL) and degraded water quality (WQ).

<b>Table 1. GSP Monitoring Wells</b>				
<b>Well</b>	<b>Well Type</b>	<b>Well Owner</b>	<b>Representative Monitoring Site for WL</b>	<b>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	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 (Pomona) <sup>(a)</sup>	X	
MW-5	Monitoring	Calsol (Pomona) <sup>(a)</sup>	X	X
New Spadra Monitoring Well	Monitoring	Spadra GSA	n/a <sup>(b)</sup>	n/a <sup>(b)</sup>
(a) This monitoring well is constructed for Calsol Inc. monitoring; monitoring data is collected by the City of Pomona				
(b) This monitoring well has not been constructed yet. When the well is constructed and monitoring has been initiated at this well, it will be considered for inclusion as a representative monitoring site.				

West Yost will coordinate with the well owners of the 12 wells to: verify the status of well; schedule and conduct field visits to each site with the well owners; collect additional well information if needed; obtain future access to well site and the well; establish the monitoring protocols; and coordinate on the frequency of water quality monitoring and laboratory analytical methods used.

A site visit will be conducted at each well to ascertain access to the well site and the well; the physical possibility to install a transducer; the depth-to-groundwater and the proper depth for the transducer in the well; and the proper hardware, direct read cable, and transducer to purchase for installation. The transducers will be installed via direct-read cables to allow the transducer to always remain in the well, which will prevent transducer displacement and damage and allow for efficient data downloads.

West Yost will purchase all transducers, direct read cables, and installation hardware, and will conduct a second field visit to install the transducers at each well. During installation, a well sketch will be drawn that includes the well location, well construction in relation to the ground surface, location of the designated reference point for measuring depth-to-water, and measured distance from the ground to the



designated reference point. Pictures of the well and well site will be taken. These photos and well sketches will be maintained in HydroDaVE for easy access to this well information. HydroDaVE will be updated with the reference point information and elevation.

Two weeks after installation, a third field visit will be conducted to test the functionality of the transducers and ensure they are working properly. This will prevent the loss of data due to malfunction or improper installation. Any issues identified will be addressed immediately.

### ***Task 1.2. Monitoring of Groundwater Levels***

The objective of this task is to collect and compile groundwater-elevation data in the Spadra Basin measured by all well owners through water year 2022, and routinely download the groundwater-elevation data from the transducers set up in Task 1.1. at the 12 GSP monitoring wells through October 2023.

First, all historical data for depth-to-groundwater will be collected from well owners for the period June 2019 to September 2022. Measurements prior to June 2019 were already collected and uploaded to HydroDaVE to support GSP development. These historical data will be collected during November-December 2022 from the various well owners and/or monitoring entries, which is around the same time the transducers will be installed at the 12 GSP monitoring wells to initiate the collection of high-frequency groundwater-elevation measurements in Task 1.1. All data will be checked for QA/QC and uploaded to HydroDaVE.

Second, quarterly field visits will be conducted to download the 15-minute data from the transducers at the 12 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 three quarterly downloads for the period November 2022 through October 2023.

### ***Task 1.3. Monitoring of Groundwater Quality***

The objective of this task is to collect and compile groundwater quality data collected in the Spadra Basin by the well owners through water year 2022.

Groundwater-quality sampling and analyses in the Spadra Basin will occur 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 (laboratory analytical methods and detection limits are also listed in Table 4-2). 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.<sup>1</sup> For the remaining wells in the Spadra Basin that are not monitored by the Spadra GSA, water-quality sampling are performed by well owners and/or monitoring entities for varying analytes and at varying frequencies. In November 2022, all groundwater-

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<sup>1</sup> For this scope of services period, it is assumed that no groundwater-quality sampling will be done directly by the GSA. If a well owner is unable to monitor for the analytes and frequency prescribed in the GSP Monitoring Program, then the GSA will determine if they conduct the sampling in a subsequent year from this scope of service period ending in October 2023. The Spadra Basin monitoring well that is to be constructed in September 2022 will be sampled for groundwater-quality following construction of the well.

quality data collected since June 2019 will be collected from the well owners, checked for QA/QC, and uploaded to HydroDaVE.

#### ***Task 1.4. Monitoring of Groundwater Production***

The objective of this task is to collect and compile groundwater production data collected in the Spadra Basin by the well owners through water year 2022.

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. In November 2022, all production data collected since June 2019 will be collected from the well owners, checked for QA/QC, and uploaded to HydroDaVE.

Meter testing and calibration will be performed every two years by a California-licensed pump contractor to ensure meter accuracy. Meter testing and calibration will be performed by the well owners during water year 2022 or 2023 and will be reported to the GSA before October 2023.

#### ***Task 1.5. 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 the Pomona Water Reclamation Plant effluent discharge to the South San Jose Creek.

The discharge from the Pomona WRP is a portion of the flow in South San Jose Creek. These data are recorded by LACSD. In November 2022, all historical data will be collected from LACSD, checked for QA/QC, and uploaded to HydroDaVE.

#### ***Task 1.6. Data gaps identified to address in the first year – Private Well Canvas***

The objective of this task is to fill a data gap identified in the GSP for the monitoring network.

The GSP Regulations 23 CCR §354.38 requires the assessment and improvement of the GSP monitoring network, including the identification of data gaps and steps to fill the data gaps in the next five years. The GSP Monitoring Program includes a description of data gaps and actions that can be taken by the GSA to fill data gaps during GSP implementation. This task includes completing the first action:

- Perform a well canvas to locate and identify unknown private wells in the basin, and work with well owners for inclusion in the GSP monitoring program.

In this task, existing resources will be obtained and reviewed for information that would provide a lead to discover any unknown private production wells in the basin that is still in existence. This will include mining online and publicly available data sets with well records, including the Los Angeles County Department of Public Health, Los Angeles County of Public Works, and the DWR Well Completion Report Database. Information will be gathered to identify any potential existing inactive or active private production wells. Field visits will be conducted to try and locate the wells. If private wells are located, West Yost will work with well owners for inclusion in the GSP monitoring program.

### **Task 2. Prepare the Spadra Basin GSP Annual Report for 2022**

The objective of this task is to prepare the first Spadra Basin GSP Annual Report for water year 2022 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 2022 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 November 2022 to collect the monthly water use data through the end of water year 2022 (September 2022). Since this data has not been collected by the GSA since the GSP preparation, data from approximately January 2020 to September 2022, will be collected during this first effort. Monthly precipitation estimates from the PRISM

Climate group<sup>2</sup> 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).

### ***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 2022. 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 2022
- Map of groundwater pumping for water year 2022
- Maps of groundwater elevation contours for fall 2021 and spring 2022
- Hydrographs of groundwater elevations and water year type through water year 2022
- Map of change in groundwater storage from water year 2021 to 2022
- 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
- Table of annual volumes of surface water supply used or available for use for groundwater recharge or in-lieu use for water year 2022
- Table of annual volumes total water use for water year 2022
- Graphics that show the monitoring data at the representative monitoring wells in relation to Sustainable Management Criteria

All data will be compiled, analyzed and presented in maps, tables, and data graphics presented in Sections. The preparation of the groundwater elevation contours and change in storage volumes will use specific methods:

- Groundwater elevation contours for fall 2021 and spring 2022, 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 through water year 2022 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 and three other Basin Optimization Scenarios. The water budget provides estimates of annual change in storage and cumulative change in storage for

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<sup>2</sup> [PRISM Climate Group, Oregon State U](#)

these periods. To estimate a change in storage through the water year 2022, the projected pumping will be replaced with their respective actual values for July 2018 to September 2022, and recharge<sup>3</sup> to the basin will be estimated based on the actual precipitation through water year 2022. The model calibration period will be extended through water year 2022 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 2022.

### ***Task 2.3. Prepare the 2022 Annual Report and Data Submittals***

The objective of this task is to prepare the Spadra Basin GSP Annual Report for water year 2022 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 table mapping the SGMA annual report requirements to the sections, tables, and figures in the report. The recommended outline for the report is summarized below:

#### **Executive Summary.**

**Section 1 – Introduction.** This section will provide background on the Spadra Basin area, the GSP, the monitoring program, and annual reporting requirements for SGMA. Will include the map of location covered by report and map of the monitoring program. This section will also include the Annual Report Elements Guide.

**Section 2 – Basin Conditions.** This section will describe the climate and precipitation in the Spadra Basin and determination of water year type; groundwater pumping; groundwater elevation conditions; and change in groundwater storage. This section will include: graph depicting annual precipitation and a cumulative departure from the mean precipitation plot; table and map of groundwater pumping; maps of groundwater elevation contours for fall 2021 and spring 2022; hydrographs of groundwater elevations and water year type; map of change in groundwater storage for water year 2022; and graph depicting water year type, groundwater use, the annual change in groundwater storage, and cumulative change in groundwater in storage for the basin through water year 2022.

**Section 3 – Water Use.** This section will describe the total estimated water use in the Spadra Basin, including surface water. This section will include the tables of annual volumes of surface water supply used or available for use for groundwater recharge or in-lieu use, and annual volumes total water use for water year 2022

**Section 4 – GSP Implementation and Progress.** This section will describe the sustainable management criteria for the Sustainability Indicators for the Spadra Basin and status of the criteria with the current monitoring data, and the activities conducted by the Spadra Basin GSA pursuant to the GSP. This section will include graphics that show the monitoring data at the representative monitoring wells in relation to the Sustainable Management Criteria.

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<sup>3</sup> 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.

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, 2023.

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](https://sgma.water.ca.gov/portal/resources/data/gsp_annualreport/public/GSP%20Annual%20Reportin%20Module%20User%20Manual.pdf). This includes Microsoft Excel files<sup>4</sup> of groundwater level, groundwater pumping, surface water supply, and total water use data for water year 2022 (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 2022.
- West Yost will provide a final Spadra Basin GSP Annual Report for 2022.
- 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 2022.

### 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 three 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 Phase 1 above is shown in Table 2 (Attachment B) with a not-to-exceed budget of \$157,763. Table 3 summarizes the cost and total person days 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. Setup and Conduct the Monitoring Program for the First Year	51,762	14,410	66,172
Task 2. Prepare the Spadra Basin GSP Annual Report for 2022	70,141	0	70,141
Task 3. Project Management and Ad Hoc Meetings	21,451	0	21,451
<b>Total:</b>			<b>\$157,763</b>

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<sup>4</sup> The DWR requires data be uploaded to the GSP Annual Report Module using standardized Microsoft Excel templates.

The services will be billed on a time-and-materials basis at the billing rates set forth in West Yost's attached 2022 - 2023 Billing Rate Schedule (Attachment C).

## 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 November 2022 through October 2023.

<b>Table 4. General Schedule for Spadra Basin GSP Monitoring and Report for the First Year</b>												
Task	Nov -22	Dec -22	Jan- 23	Feb- 23	Mar -23	Apr- 23	May -23	Jun -23	Jul- 23	Aug- 23	Sep- 23	Oct- 23
<b>Task 1. Setup and Conduct Monitoring Program for the First Year</b>												
1.1 Set up of the Monitoring Network												
1.2 Monitoring of Groundwater Levels - Collection												
1.2 Monitoring of Groundwater Levels - Quarterly Downloads												
1.3 Monitoring of Groundwater Quality												
1.4 Monitoring of Groundwater Production												
1.5 Monitoring of Surface Water												
1.6 Data Gaps to Address in the First Year - Private Well Canvas												
<b>Task 2. Prepare the Spadra Basin GSP Annual Report for 2022</b>												
2.1 Compile Data for the Annual Report												
2.2 Prepare Maps, Tables, and Graphics												
2.3 Prepare the Annual Report and Data Submittals												
<b>Task 3. Project Management and Ad Hoc Meetings</b>												
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.

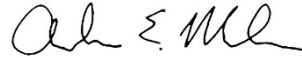
Sherry Shaw  
September 7, 2022  
Page 11

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  
Senior Scientist II



Andy E. Malone, PG  
Principal Geologist

cc: Erik Hitchman, Walnut Valley Water District

Attachment A. Annual Report Elements Guide

Attachment B. Table 2. Line-Item Fee Estimate

Attachment C. West Yost 2022 - 2023 Billing Rate Schedule



## Attachment A

### Annual Report Elements Guide

## Groundwater Sustainability Plan Annual Report Elements Guide

Basin Name			
GSP Local ID			
<b>California Code of Regulations - GSP Regulation Sections</b>	<b>Groundwater Sustainability Plan Elements</b>	<b>Document page number(s) that address the applicable GSP element.</b>	<b>Notes: Briefly describe the GSP element does not apply.</b>
<b>Article 5</b>	<b>Plan Contents</b>		
<b>Subarticle 4</b>	<b>Monitoring Networks</b>		
<b>§ 354.40</b>	<b>Reporting Monitoring Data to the Department</b>		
	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.		
<b>Article 7</b>	<b>Annual Reports and Periodic Evaluations by the Agency</b>		
<b>§ 356.2</b>	<b>Annual Reports</b>		
	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	Senior Scientist II	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. Setup and Conduct Monitoring Program for the First Year		36.0									\$51,762			\$14,410				\$66,172	
1.1 Set up and Maintenance of the Monitoring Network <sup>(a)</sup>								1	11.5		\$13,975					\$13,420		\$27,395	
Coordination with well owners and conducting well site visits			0.25		1.25		2.25		1	3.8	\$4,631			\$240	\$80	\$320		\$4,951	
Purchase of transducers, direct read cables, and installation hardware			0.20		1.00			1	1.2	\$2,030				\$12,700		\$12,700		\$14,730	
Installation of transducers and direct read cables, and set up of well information in HydroDaVE data management system			0.25		0.75		3.50		1	4.5	\$4,989			\$240		\$240		\$5,229	
Well site follow-up visit to ensure well access and that the transducers are working properly.			0.25		0.25		1.50		1	2.0	\$2,325			\$120	\$40	\$160		\$2,485	
1.2 Monitoring of Groundwater Levels								1	14.6		\$22,184						\$880	\$23,064	
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 <sup>(a)</sup>			0.50		1.00	0.75		1	2.3	\$3,702						\$0		\$3,702	
Quarterly downloads of transducers at the 12 GSP monitoring wells; QA/QC, and upload in HydroDaVE data management system <sup>(b)</sup>			0.60		2.00		1.50		3	12.3	\$18,482			\$520	\$360	\$880		\$19,362	
1.3 Monitoring of Groundwater Quality <sup>(a)</sup>			0.75			1.25			1	2.0		\$3,314					\$0	\$3,314	
1.4 Monitoring of Groundwater Production <sup>(a)</sup>			0.25			0.75			1	1.0		\$1,566					\$0	\$1,566	
1.5 Monitoring of Surface Water <sup>(a)</sup>			0.50			1.25			1	1.8		\$2,786					\$0	\$2,786	
1.6 Data Gaps to Address in the First Year - Private Well Canvas <sup>(b)</sup>		0.25	1.00			2.50	1.50		1	5.3		\$7,937		\$220			\$110	\$8,047	
Task 2. Prepare the Spadra Basin GSP Annual Report for 2022 <sup>(b)</sup>		36.3									\$70,141			\$0				\$70,141	
2.1 Compile Data for the Annual Report			0.25			0.75			1	1.0		\$1,646					\$0	\$1,646	
2.2 Prepare Maps, Tables, and Data Graphics									1	19.3		\$37,299					\$0	\$37,299	
Prepare maps on location and monitoring program, and graphic depicting precipitation and water year type			0.30		1.00	0.25			1	1.6	\$2,717					\$0			
Prepare map and table on groundwater pumping			0.30		0.75				1	1.1	\$1,931					\$0			
Develop spring and fall 2022 groundwater elevation contours and prepare maps		0.75	0.50		2.50				1	3.8	\$7,206					\$0			
Develop Hydrographs for 12 GSP Monitoring Wells			0.50	1.25					1	1.8	\$3,528					\$0		\$0	
Estimate water year change in storage through 2022, and prepare graphic showing annual and cumulative change in storage, groundwater pumping, and water year type		0.25	1.50	3.00	1.25				1	6.0	\$11,868					\$0		\$0	
Estimate spatial change in storage for water year 2021 to 2022 and prepare map		0.25	0.50		1.25				1	2.0	\$3,844					\$0		\$0	
Prepare tables of annual surface water and water use for water year 2022			0.20		0.25				1	0.5	\$865					\$0			
Prepare graphics of monitoring data in relation to Sustainable Management Criteria			0.50	1.75	0.50				1	2.8	\$5,340					\$0		\$0	
2.3 Prepare the 2022 Annual Report and Data Submittals									1	16.0		\$31,196					\$0	\$31,196	
Prepare Draft Report		1.00	4.75		4.00			1.00	1	10.8	\$21,030					\$0		\$0	
Prepare Final Report		0.25	1.25		1.00			0.50	1	3.0	\$5,708					\$0		\$0	
Prepare data files and other submittals for the Annual Report			1.25		1.00				1	2.3	\$4,458					\$0		\$0	
Task 3. Project Management and Ad Hoc Meetings <sup>(c)</sup>		9.2									\$21,451			\$0				\$21,451	
3.1 Project Management			0.30						13	3.9		\$9,385					\$0	\$9,385	
3.2 Ad-hoc GSA Meetings		0.50	1.25						3	5.3		\$12,066					\$0	\$12,066	
Project Totals		3	17	6	20	8	10	2		80.5			\$143,353				\$14,410	\$157,763	

Notes:  
(a) This work will occur in 2022, so the cost is based on the 2022 rates.  
(b) This work will occur in 2023, so the cost is based on the 2023 rates.  
(c) This work will occur in 2022 and 2023 so the cost are split between 2022 and 2023 rates.

## Attachment C

### 2022 - 2023 West Yost Billing Rate Schedule

# 2022 - 2023 Billing Rate Schedule

(Effective July 1, 2022 through December 31, 2023)



LABOR CHARGES (DOLLARS PER HOUR)			
POSITIONS	2022		2023
<b>ENGINEERING</b>			
Principal/Vice President	/ \$328	/	\$344
Engineer/Scientist/Geologist Manager II	/ \$324	/	\$341
Engineer/Scientist/Geologist Manager I	/ \$310	/	\$326
Principal Engineer/Scientist/Geologist II	/ \$298	/	\$313
Principal Engineer/Scientist/Geologist I	/ \$280	/	\$294
Senior Engineer/Scientist/Geologist II	/ \$264	/	\$277
Senior Engineer/Scientist/Geologist I	/ \$251	/	\$264
Associate Engineer/Scientist/Geologist II	/ \$231	/	\$242
Associate Engineer/Scientist/Geologist I	/ \$215	/	\$226
Engineer/Scientist/Geologist II	/ \$201	/	\$211
Engineer/Scientist/Geologist I	/ \$173	/	\$182
Engineering Aide	/ \$101	/	\$106
Field Monitoring Services	/ \$93	/	\$97
Administrative IV	/ \$148	/	\$156
Administrative III	/ \$134	/	\$141
Administrative II	/ \$112	/	\$118
Administrative I	/ \$89	/	\$93
<b>ENGINEERING TECHNOLOGY</b>			
Engineering Tech Manager II	/ \$324	/	\$341
Engineering Tech Manager I	/ \$322	/	\$339
Principal Tech Specialist II	/ \$306	/	\$321
Principal Tech Specialist I	/ \$296	/	\$310
Senior Tech Specialist II	/ \$283	/	\$297
Senior Tech Specialist I	/ \$271	/	\$284
Senior GIS Analyst	/ \$245	/	\$257
GIS Analyst	/ \$232	/	\$243
Technical Specialist IV	/ \$247	/	\$260
Technical Specialist III	/ \$221	/	\$233
Technical Specialist II	/ \$197	/	\$207
Technical Specialist I	/ \$173	/	\$182
Technical Analyst II	/ \$148	/	\$156
Technical Analyst I	/ \$124	/	\$130
Technical Analyst Intern	/ \$100	/	\$105
Cross-Connection Control Specialist IV	/ \$175	/	\$184
Cross-Connection Control Specialist III	/ \$157	/	\$164
Cross-Connection Control Specialist II	/ \$140	/	\$147
Cross-Connection Control Specialist I	/ \$129	/	\$135
CAD Manager	/ \$195	/	\$204
CAD Designer II	/ \$171	/	\$180
CAD Designer I	/ \$151	/	\$159

See page 2 for important additional information on rates

# 2022 - 2023 Billing Rate Schedule

(Effective July 1, 2022 through December 31, 2023)



LABOR CHARGES (DOLLARS PER HOUR)				
POSITIONS		2022		2023
CONSTRUCTION MANAGEMENT				
Senior Construction Manager	/	\$313	/	\$329
Construction Manager IV	/	\$275	/	\$289
Construction Manager III	/	\$217	/	\$228
Construction Manager II	/	\$205	/	\$215
Construction Manager I	/	\$191	/	\$200
Resident Inspector (Prevailing Wage Groups 1)	/	\$215	/	\$226
Resident Inspector (Prevailing Wage Groups 2)	/	\$207	/	\$217
Resident Inspector (Prevailing Wage Groups 3)	/	\$185	/	\$195
Resident Inspector (Prevailing Wage Groups 4)	/	\$167	/	\$175
Apprentice Inspector	/	\$151	/	\$159
CM Administrative II	/	\$109	/	\$115
CM Administrative I	/	\$81	/	\$85
Field Services	/	\$215	/	\$226

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at 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, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions 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.

## 2022 - 2023 Billing Rate Schedule

(Effective July 1, 2022 through December 31, 2023)



EQUIPMENT CHARGES	BILLING RATES
2" Purge Pump & Control Box	\$270 / day
Aquacalc / Pygmy or AA Flow Meter	\$28 / day
Emergency SCADA System	\$35 / day
Gas Detector	\$80 / day
Generator	\$39 / day
Hydrant Pressure Gauge	\$10 / day
Hydrant Pressure Recorder, Impulse (Transient)	\$55 / day
Hydrant Pressure Recorder, Standard	\$40 / day
Low Flow Pump Controller	\$75 / day
Powers Water Level Meter	\$32 / day
Precision Water Level Meter	\$19 / day
Stainless Steel Wire per foot	\$0.03 / day
Storage Tank	\$15 / day
Sump Pump	\$24 / day
Transducer Components (per installation)	\$23 / day
Trimble GPS – Geo 7x	\$220 / day
Tube Length Counter	\$22 / day
Turbidity Meter	\$22 / day
Vehicle	\$10 / day
Water Flow Probe Meter	\$20 / day
Water Quality Meter	\$27 / day
Water Quality Multimeter	\$185 / day
Well Sounder	\$30 / day