



AGENDA

REGULAR MEETING OF THE BOARD OF DIRECTORS OF CARPINTERIA GROUNDWATER SUSTAINABILITY AGENCY

CARPINTERIA CITY HALL
5775 CARPINTERIA AVENUE
CARPINTERIA, CA 93013

Wednesday, February 28, 2024 at 5:35 p.m.

Join Zoom Meeting

<https://us06web.zoom.us/j/86523740998?pwd=V4tZi7PaLtbN7BNuFJ0fRI7pKD0YHf.1>

Meeting ID: 865 2374 0998

Passcode: 177073

or

Dial by Phone: 1-669-444-9171

1. CALL TO ORDER
2. PUBLIC FORUM (Any person may address the Board of Directors on any matter within its jurisdiction which is not on the agenda).
3. APPROVAL ITEMS
 - A. ****Minutes for the Meeting of the Board held on January 24, 2024**
 - B. ****Disbursement Report for December 16, 2023 – January 15, 2024**
4. UNFINISHED BUSINESS – none
5. NEW BUSINESS –
 - A. ****Consider engaging the services of DCSE for GIS services with respect to estimating private groundwater extraction (for information, Executive Director Robert McDonald).**
 - B. ****Consider proposed Rate and Budget Schedule for GSA Fees. (for information, Executive Director Robert McDonald).**
6. EXECUTIVE DIRECTOR REPORTS (for information) –
 - A ****Financials**
7. ADJOURNMENT

Robert McDonald, Secretary

******Indicates attachment of document to agenda packet.

The above matters are the only items scheduled to be considered at this meeting.

Note: The above Agenda was posted at Carpinteria Valley Water District Administrative Office in view of the public no later than 5:00 p.m., February 25, 2024. The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied benefits of, the District's programs, services, or activities because of any disability. If you need special assistance to participate in this meeting, please contact the District Office at (805) 684-2816. Notification at least twenty-four (24) hours prior to the meeting will enable the District to make appropriate arrangements. Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the Carpinteria Valley Water district offices located at 1301 Santa Ynez Avenue, Carpinteria during normal business hours, from 8 am to 5 pm.

**Indicates attachment of document to agenda packet.

	MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS OF CARPINTERIA GROUNDWATER SUSTAINABILITY AGENCY	
	January 24, 2024	
	Chairman Van Wingerden called the regular meeting of the Carpinteria Groundwater Sustainability Agency Board of Directors held in the Carpinteria City Hall Chamber to order at 5:36 p.m., Wednesday, January 24, 2024.	
	Directors Present; Johnson, Balch, Holcombe, Roberts and Van Wingerden Director Absent: none	
	Others Present: Bob McDonald	
	Cari Ann Potts Norma Rosales Lisa Silva Maso Motlow	Dave O'Rourke Tracey Solomon Scott Van Der Kar Peter Lapidus Anthony Priestman
PUBLIC FORUM	No one from the public addressed the Board.	
MINUTES	Following discussion, Director Holcombe moved, and Director Balch seconded the motion to approve the minutes of the Board meeting held on November 29, 2023. The motion carried by a 5-0 vote. The minutes were approved by roll call as follows; Ayes: Johnson, Holcombe, Balch, Roberts and Van Wingerden Nayes: None Absent: None	
DISBURSEMENT REPORT	Following discussion, Director Balch moved, and Director Holcombe seconded the motion to approve the monthly bills for the period of November 16, 2023 through December 15, 2023. The motion carried by a 5-0 vote. The motion was approved by roll call as follows; Ayes: Holcombe, Johnson, Balch, Roberts and Van Wingerden Nayes : none Absent: none	

SEMI-ANNUAL VENDOR PAYMENT REPORT	Following discussion, Director Johnson moved, and Director Balch seconded the motion to approve the Semi-Annual Vendor Payment Report for FY 23/24. The motion carried by a 5-0 vote. The motion was approved by roll call as follows; Ayes: Holcombe, Johnson, Balch, Roberts and Van Wingerden Nayes : none Absent: none
INDEPENDENT AUDITOR’S REPORT AND FINANCIAL STATEMENT FOR FY 22-23	Treasurer Rosales presented to consider the Independent Auditor’s Report and Financial Statements for FY 22-23. Presentation by Tracey Solomon, Bartlett, Pringle & Wolf, LLP. Following discussion, Director Roberts moved, and Director Holcombe seconded the motion to receive and file the Auditor’s Report. The motion carried by a 5-0 vote. The motion was approved by roll call as follows; Ayes: Holcombe, Johnson, Balch, Roberts and Van Wingerden Nayes : none Absent: none
GROUNDWATER SUSTAINABILITY PLAN	Executive Director McDonald presented to consider the Proposed Groundwater Sustainability Plan with Public Comments. Presentation with Public Comments by Dave O’Rourke, GSI. Adoption was on 11/29/23 however 90 days were required from the initial notification date of 10/6/23 – requesting readoption of the GSP following the Public Hearing. For Information.
PUBLIC HEARING	Following the discussion of the Proposed Groundwater Sustainability Plan, Chairman Van Wingerden began the Public Hearing at 5:56 p.m. 1) Opening of Public Hearing by Chariman Van Wingerden at 5:56 p.m. 2) Receipt of public comment by Chairman Van Wingerden • No one addressed the Board 3) Closing of Public Hearing by Chairman Van Wingerden at 5:56 p.m. 4) Director Comments

RESOLUTION NO. 031	Executive Director McDonald presented to consider Resolution No. 031 adopting a Groundwater Sustainability Plan for Carpinteria Groundwater Basin. <u>Resolution No. 031 Resolves to find:</u> 1) The GSP, in the form presented this day to the Board of Directors and subject to any final non-substantive edits that may be made at the Executive Director’s discretion prior to submittal to DWR, is hereby approved and adopted. 2) The Executive Director is authorized and directed to timely provide notification of this approval and adoption to DWR, including a copy of this Resolution, the approved GSP, and any additional information required by law. 3) Rescinds Resolution No. 030 adopted on 11/29/23 Following discussion, Director Roberts moved, and Director Holcombe seconded the motion to adopt Resolution No. 031. The motion carried by a 5-0 vote. The motion was approved by roll call as follows; Ayes: Johnson, Balch, Holcombe, Roberts and Van Wingerden Nayes: None Absent: None
GROUNDWATER SOLUTION, INC.	Executive Director McDonald presented to consider Engaging Groundwater Solutions, Inc (GSI) for SGMA Annual Reporting in an amount not to exceed \$49,958. GSA Annual Report 2024: - Due to DWR by April 1, 2024 - Required under SGMA - Work will complete Water Budget Update for 2021-2023 - Proposal from GSI in the amount of \$49,958 to complete Following discussion, Director Holcombe moved, and Director Roberts seconded the motion to engage GSI in an amount not to exceed \$49,958. The motion carried by a 5-0 vote. The motion was approved by roll call as follows; Ayes: Johnson, Balch, Holcombe, Roberts and Van Wingerden Nayes: None Absent: None

	Scott Van Der Kar addressed the Board concerning containing costs. Questioning if there is a chance of not receiving future grants to help, what is expected when costs go up, most likely fall on taxpayers.
ADJOURNMENT	Chairman Van Wingerden adjourned the meeting at 6:07 p.m.
	Robert McDonald, Secretary



Monthly Disbursement Report
Carpinteria Groundwater Sustainability Agency

Payment Date: 12/16/23 - 1/15/24

Disbursement Report				
Carpinteria Groundwater Sustainability Agency Account - Check Report				
Vendor	Description	Payment Number	Payment Date	Payment
COASTAL VIEW NEWS				208.00
	GSA - PUBLIC HEARING - GSP 111623, 112323	2085	12/20/2023	208.00
FRUIT GROWERS LABORATORY, INC				4,449.00
	AB3030 - INORGANIC ANALYSIS	2089	12/27/2023	1,298.00
	AB3030 - INORGANIC ANALYSIS	2089	12/27/2023	1,298.00
	AB3030 - INORGANIC ANALYSIS	2089	12/27/2023	811.00
	AB3030 - INORGANIC ANALYSIS	2089	12/27/2023	521.00
	AB3030 - INORGANIC ANALYSIS	2089	12/27/2023	521.00
GROUNDWATER SOLUTIONS, INC.				18,864.75
	GSP DEVELOPMENT - NOVEMBER	2086	12/20/2023	18,864.75
KATZ & ASSOCIATES, INC.				656.25
	GSP DEVELOPMENT - GSPAC - NOVEMBER	2087	12/20/2023	656.25
MYERS, WIDDERS, GIBSON JONES & FEINGOLD, LLP				882.00
	GENERAL COUNSEL - CGSA - NOVEMBER	2088	12/20/2023	882.00
			\$	25,060.00



STAFF REPORT Item 5.A.

From: Robert McDonald, Executive Director

Prepared by: Maso Motlow, Management Analyst

For Consideration: Item 5.A. Approve CGSA to contract with DCSE to estimate net groundwater pumping based on remotely sensed evapotranspiration data.

Background

For the purposes of collecting revenue and managing groundwater, the Carpinteria GSA needs a consistent and unbiased method to estimate groundwater pumping. Currently, the GSA estimates groundwater pumping based on the crop coverage on each parcel, crop-specific water use factors, and then subtracts known CVWD metered water use. This approach represents applied water and does not account for potential recharge to the basin. Further, landowners have expressed data quality concerns with this approach due to few properties without wells to derive crop factors from, crops of different ages receiving different quantities of water, and the impact of soil type and topography on irrigation intensity and frequency.

To improve the accuracy of its estimates, the GSA is proposing to use remote sensing of evapotranspiration (ET) to determine net groundwater pumping, instead of gross pumping as an additional data point. This approach focuses on net, rather than gross, groundwater pumping by considering both the consumptive water use of the crop (represented by ET) and recharge to the groundwater basin (represented by precipitation). Consumptive water use estimated via ET may differ from the total water applied to the crop because some water may percolate back into the basin.

Using ET to estimate crop water demand is becoming commonplace throughout the Central Valley and Sacramento San Joaquin Delta. Work by UC Davis, DWR, and NASA support the use of remote sensing-based water use estimates and recognize that remote sensing is less labor intensive than manually estimating crop coverage.

Method

DCSE will calculate the monthly and annual net use of groundwater for the area overlying the groundwater basin using remotely sensed ET data 4 times each month. Metered water delivery information from Carpinteria Valley Water District, and precipitation data from local rain gauges will be used to calculate how much irrigation water comes from the private groundwater wells using the ET data. All of this information will be evaluated spatially using GIS software and a value for net groundwater pumping for each parcel will be generated.

The GSA also interviewed LandIQ which calibrates its remote sensing data using on the ground eddy covariance stations. Although LandIQ's approach does produce more accurate

evapotranspiration data, each covariance station costs upwards of \$50,000. Therefore, the GSA is proposing to utilize DCSE's approach.

Deliverable

DCSE will create an online portal and interactive map where the GSA can download monthly and annual data for each agricultural parcel. The portal will provide evapotranspiration data for each parcel and net groundwater pumping for each parcel.

Schedule: DCSE can begin work immediately and will complete all deliverables by the middle of May 2024. This includes the data for fiscal year 2022 to compare to the existing crop-based methodology.

Cost: Funds for this contract (\$20,000) will come from GL 20-560-6307 (GSA Groundwater Professional Services).

Recommendation: Approve Staff to contract with DCSE for ET based service.



February 19, 2024

The Board of Directors
Carpinteria Valley Water District
1301 Santa Ynez Avenue
Carpinteria, CA 93013

RE: Proposed Scope of Work (SOW) to develop "GROWMAS (Geospatial Resources of Water Management for Agricultural Systems)" Portal for Carpinteria Valley Water District (CVWD)

Dear Board of Directors:

DCSE is pleased to submit its proposal for the above referenced project to Carpinteria Valley Water District.

The following document presents our proposed scope of work, and cost structure. DCSE has brought together a dynamic team comprised of senior managers and technical staff with domain expertise in water GIS data management, remote sensing, and application development. The team members have strong background in managing and successfully completing similar projects.

DCSE has over 33 years of experience in providing high-quality consulting services to many water agencies such as CVWD. Our extensive water GIS experience and remote sensing gives us the ability to anticipate, identify and resolve important project issues and challenges. This combination helps ensure that CVWD will receive quality service and products on time and within budget.

This proposal has been signed by the person with TITLE and AUTHORITY TO BIND the firm in a legal contract. Please do not hesitate to contact me should you have any questions or need additional information.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Masoud', with a long, sweeping horizontal line extending to the right.

Masoud Hoseyni, Ph.D.

President

mhoseyni@dcse.com

Direct Phone: (949) 465-3407

Cell: (310) 383-8959

Scope Of Work

GROWMAS Portal Development

The following describes DCSE's proposed "Scope of Work" to develop the GROWMAS (Geospatial Resources of Water Management for Agricultural Systems) portal for parcel-level estimation of crop Evapotranspiration (ET), and Groundwater pumping and recharge; NTFGW (Net-To-From Groundwater), using satellite imagery and remote sensing techniques.

Task list

Scope of work will consist of the following tasks:

1. Project initiation and kick off meeting.
2. Server set up for GROWMAS implementation.
3. Prepare and clean model data inputs, including:
 - Formatting the water delivery and run off (if available) data¹
 - Checking parcels and boundaries - performing any parcel boundary adjustments²
 - Masking of any riparian/build-up areas, and calculate true area under irrigation (if needed)
4. Imagery analysis for crop ET estimation at the agricultural parcel level
5. Groundwater estimation; calculating monthly and annual NTFGW per parcel/ag field.
6. Data analysis and QC portal functionalities to generate and display results.
7. Generate and prepare ET and NTFGW maps and reports.
8. Publish maps and results on portal.
9. Prepare a brief technical/help document on use of portal.
10. Delivery meeting and presentation

Deliverables

The following provides a list of deliverables:

1. ET and NTFGW for every ag parcel and at the district level (agricultural) for a year of interest (similar to the pilot study) _ per month results

¹ Water delivery data has been considered as a monthly data (not daily).

² Updating/processing the parcel data has been considered as a one-time task. If there will be a need to update the parcel data on an annual basis, there would be a cost associated with this in the recurring cost.

2. Annual ET and NTFGW for every ag parcel and at the district level (agricultural) for a year of interest (similar to the pilot study)
3. Online maps/monthly images (pixel-based and parcel based) of ET and NTFGW and NDVI
4. GROWMAS cloud portal
5. A brief technical/help document on how to use portal; generate monthly/annual reports

District would be able to download the generated results (.CSV format) from the portal for the desired timeframe. DCSE can also download the reports and send them to the District.

Required data from District

District will provide the following data to DCSE:

- AOI
- List (or a GIS layer) of ag parcels targeted for the project.
- Monthly surface water delivery, and monthly run off (if available) for the year of interest.

Cost and Schedule

The proposed project cost would be as in Table 1. The proposed schedule is 3 months from receiving the notice to proceed and all the required data.

Table 1. DCSE Cost Proposal

Task	Cost	Description	Cost
			CVWD
1	Recurring Cost	Cost of proving the data per year. This cost is repeated for every year of data estimation.	\$12,000
2	Set up Cost	Cost to set up the environment for GROWMAS implementation; only included in the cost estimation for the first year (2022 fiscal year).	\$8,000
Total Cost for the first year of data estimation (2022 fiscal year)			\$20,000
Total Cost for any other year (following the 2022)			\$12,000

CGSA Budget - Prop 218 Schedule FY 2025		
	Task	Deadline
1	CGSA final draft budget	29-Feb-24
2	CGSA fee developed	14-Mar-24
3	Draft Prop 218 Notice to Legal	18-Mar-24
4	CGSA budget presentation	27-Mar-24
5	Address information for mailing	30-Mar-24
6	Prop 218 notice to Board	10-Apr-24
7	Cost of Service Study Finalized	10-Apr-24
8	Send notice to Infosend	12-Apr-24
9	Mail Notice	19-Apr-24
10	Public Hearing	12-Jun-24
11	Submit to County	28-Jun-24



Carpinteria Groundwater Sustainability Agency

Statement of Revenues and Expenses (unaudited)

For Fiscal: 2023-2024 | Period Ending: 12/31/2023

Account	Name	Current Total Budget	YTD Activity	Budget Remaining	% Used
OPERATIONS					
Revenues					
20-4315	Member Fees (A)	465,000	285,793	179,207	61.5%
Revenue Total:		465,000	285,793	179,207	61.5%
Expenses					
20-550-6806	GSA WTR QUALITY & TESTING	20,000	11,478	8,522	57.4%
20-560-6307	GSA GROUNDWATER PROF SVCS	10,000	4,180	5,820	41.8%
20-550-6308	GSA ANNUAL REPORTING	50,000	-	50,000	0.0%
20-560-6607	GSA SUPPLIES & EQUIPMENT	3,600	119	3,481	3.3%
20-570-6009	EMPLOYEES FICA-SOCIAL SECURITY	-	-	-	0.0%
20-570-6025	GSA PERSONNEL	122,887	48,000	74,887	39.1%
20-570-6117	GSA DIRECTORS FEES	12,600	-	12,600	0.0%
20-570-6118	GSA ADMINISTRATIVE EXPENSES	3,000	2,678	322	89.3%
20-570-6309	GSA ADMIN PROF SERVICES	62,000	9,200	52,800	14.8%
20-570-6310	GSA LEGAL PROFESSIONAL SERVICES	21,125	4,606	16,519	21.8%
20-599-7313	INTEREST EXPENSE	30,500	-	30,500	0.0%
Expense Total:		335,712	80,261	224,951	23.9%
Operating Surplus (Deficit):		129,288	205,532	(45,744)	159.0%
GRANT RELATED ACTIVITY					
Revenues					
20-4314	GSA GRANT FUNDING		657,919		
Revenue Total:			657,919		
Expenses					
20-560-6307	GSA GROUNDWATER PROF SVCS		226,581		
20-570-6118	GSA ADMINISTRATIVE EXPENSES		1,737		
Expense Total:			228,318		
Grant Surplus (Deficit):			429,601		
COMBINED SURPLUS (DEFICIT):			635,133		
CASH FLOW					
Cash in Bank, 06/30/2023			41,410		
Surplus - Operations and Grants			635,133		
Back out accrued grant revenue			(657,919)		
Back out accrued labor allocation			48,000		
Back out accrued member fees			(4,303)		
El Carro Monitoring Well expenditures			(675,994)		
CVWD cash advances and promissory note			940,000		
Net change in current liabilities and liabilities			(2,140)		
Net uncashed checks as of 12/31/23			6,353		
Cash in Bank, 12/31/2023			330,540		



Carpinteria Groundwater Sustainability Agency

Statement of Net Position

(unaudited)

As Of: 12/31/2023

Account	Name	Balance	
Assets			
20-1029	CGSA CHECKING	323,950	
20-1240	GSA GRANT REIMB RECEIVABLE	1,025,788	
20-1245	GSA MEMBER FEES RECEIVABLE	4,303	
20-1820	CONSTRUCTION IN PROGRESS	675,994	
	Total Assets:	2,030,035	<u>\$ 2,030,035</u>
Liabilities			
20-2000	ACCOUNTS PAYABLE - CGSA	12,439	
20-2032	STATE TAX PAYABLE	-	
20-2033	FEDERAL TAX PAYABLE	-	
20-2034	FICA PAYABLE	-	
20-2205	RETENTIONS PAYABLE	67,577	
20-2250	CVWD PROMISSORY NOTE	740,000	
20-2523	DUE TO CVWD	790,317	
	Total Liability:	1,610,333	
Fund Balance			
20-3050	CGSA FUND BALANCE	(215,431)	
	Total Fund Balance:	(215,431)	
	Total Beginning Equity:	(215,431)	
	Total Revenue	943,712	
	Total Expense	308,579	
	Revenues Over/Under Expenses	635,133	
	Total Equity and Current Surplus (Deficit):	419,702	
	Total Liabilities, Equity and Current Surplus (Deficit):		<u>\$ 2,030,035</u>

NOTE: The Proposition 68 grant for the Groundwater Sustainability Plan will be reported separately beginning 01/31/2024