



AGENDA

Regular Meeting of the Cuyama Basin Water District

Wednesday, October 28, 2020 at 3:30 p.m. at

Call (559) 256-4200, Phone Bridge 4: PIN 0612 then #

NOTE: PARTICIPATION BY TELECONFERENCE

Due to the rise in severity of COVID-19 and consistent with Executive Order N-29-20 suspending provisions of the Brown Act to allow for public meetings to be conducted remotely, the Cuyama Basin Water District will hold its regular Board of Directors meeting by teleconference. There will be no meeting site open to the public. Public participation is encouraged using the teleconference information referenced above.

- 1. Call to Order**
- 2. Pledge of Allegiance**
- 3. Roll Call**
- 4. Self-Introductions**
- 5. Public Comment**—This portion of the meeting is set aside to provide the public an opportunity to bring to the attention of the Board members matters within the jurisdiction of the Board and which are not on today's agenda. No action will be taken on any matter discussed during this portion of the meeting. The total time allotted for this portion of the meeting may be limited and to no more than 5 minutes for each speaker.
- 6. Minutes**
 - a. September 23, 2020 Board Meeting Minutes – Board Approval Needed**
- 7. Financial Report**
 - a. YTD Financial Report and Accounts Payable – Board Approval Needed**
 - b. Assessments Status Report**
- 8. Management/Administration**
 - a. Status Report**
 - b. Review and Accept 2019 FY Audit – Board Approval Needed**

9. Groundwater Sustainability Agency (GSA) for Cuyama Basin

- a. Status Report on Cuyama Basin Groundwater Sustainability Agency
- b. Review potential CBGSA Agenda items and consider action providing any recommendations regarding agenda items.
- c. EKI update on Technical Components

10. New Business—requests for items to be placed on next agenda

11. Announcements

- a. Next meeting November 18, 2020 (Moved from November 25)
- b. Future meetings: December 23, 2020 (day before Christmas Eve) or
December 30, 2020 (day before New Year's Eve)
January 27, 2021

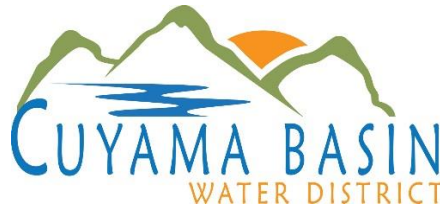
12. Adjournment

Americans with Disabilities Act of 1990: Under this act, a qualifying person may request the District provide a disability-related modification or accommodation in order to participate in any public meeting of the District. Such assistance includes alternative formats for the agendas and agenda packets used for any public meetings of the District. Requests for assistance shall be made in person, via telephone, or in written form to Matt Klinchuch at 661-616-5900, or mklinchuch@ppeng.com. Requests must be received at least 48 hours prior to a public meeting.

Acronyms*

AF	Acre-Feet
BMP	Best Management Practice
CBGSA	Cuyama Basin Groundwater Sustainability Agency
CBWD	Cuyama Basin Water District
CCSD	Cuyama Community Services District
CEQA	California Environmental Quality Act
CFS	cubic feet per second
CVGB	Cuyama Valley Groundwater Basin
DAC	Disadvantaged Community (80% CA MHI)
DWR	Department of Water Resources
ET	Evapotranspiration
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HCM	Hydrogeologic Conceptual Model
ILRP	Irrigated Lands Regulatory Program
JPA	Joint Powers Authority
LAFCo	Local Agency Formation Commission
MOU	Memorandum of Understanding
PSP	Proposed Solicitation Package
SBCWA	Santa Barbara County Water Agency
SDAC	Severely Disadvantaged Community (60% CA MHI)
SGMA	Sustainable Groundwater Management Act of 2014
SWRCB	State Water Resources Control Board
USGS	United States Geological Survey

*More to be added as necessary



MEETING MINUTES
Regular Meeting of the
Cuyama Basin Water District

Wednesday, September 23rd, 2020 at 3:30 p.m.
Participation by Teleconference

BOARD MEMBERS PRESENT:

Derek Yurosek, President
Byron Albano, Vice-President
Tom Bracken, Treasurer
George Cappello
Jane Wooster

Matt Klinchuch, CBWD GM
Alan Doud, CBWD Counsel
Brad DeBranch, CBWD Secretary
Jeff Shaw, EKI
Jim Menzies
Dan Wilke, Bolthouse Farms
Dan Clifford
Lorena Baste, Sunridge Nursery
Brenton Kelly

AUDIENCE MEMBERS PRESENT:

1. **Call to Order** – President Yurosek called the meeting to order at 3:31 p.m.
2. **Pledge of Allegiance** – Completed
3. **Roll Call** – Present: Directors Yurosek, Albano, Bracken, Cappello, and Wooster. Board quorum present.
4. **Self-Introductions** – All audience members on the teleconference were introduced.
5. **Public Comment** – No public comment received.
6. **Minutes**
 - a. A motion was made by Director Wooster and seconded by Director Bracken to approve the August 26, 2020 Regular Meeting Minutes. The motion passed.
7. **Financial Report**
 - a. YTD Financial Report & Accounts Payable – An overview of the current financial report and accounts payable was provided by General Manager. A motion was made by Director Cappello and seconded by Director Bracken to accept and pay the Accounts Payable for August 2020. The motion was unanimously carried.
 - b. Assessments Status Report – CBWD has received approximately 90% of landowner assessments for 2020.

8. Management/Administration

- a. Status Report – Audit for FY19 should be made available shortly for Board review.

9. Groundwater Sustainability Agency for Cuyama Basin

- a. Status Report on Cuyama Basin Groundwater Sustainability Agency – Next GSA meeting is scheduled for November 4th, 2020. No agenda has yet been provided by the GSA. An upcoming grant opportunity will be available to the GSA for implementing projects. Basins labeled as “critical” will be prioritized for initial round of funding. GSA Board approval will be critical with short turnaround time for grant proposals and awarding of funds.
- b. Potential CBGSA Agenda Items – Board has not received Agenda, but acknowledged that pumping fee collection and delegation of MA tasks will likely be topics of discussion. Board continued on to agenda item 9c.
- c. Review & Possible Action on Delegated Tasks from CBGSA – CBWD Staff briefed the Board on a draft response letter which broadened the MA boundary scope. The letter is requesting the GSA to provide clarification from original request to take on task delegation. The GSA has requested a response by September 30th. A member of the public asked about the MA including areas where individual wells are located and mandating well metering. The Board does not currently support a meter and felt that action would be premature. A motion was by Director Cappello and seconded by Director Bracken to accept the draft letter and send to GSA. The motion was unanimously carried.
- d. EKI Update on Technical Components – EKI provided overview of the MA map showing several optional boundaries based on varying model results. EKI’s goal was to determine a practical boundary in order to govern the MA. Some Board members wanted flexibility to change boundary between now and 2023 when reductions are enforced because there will be new data available to study. EKI has write up of how the boundaries were formulated and what criteria was used. The Board had consensus to provide GSA with technical memo from EKI requesting approval of the MA boundary recommendation which included the red boundary as provided in the presented options. EKI briefed the Board on a memo regarding Prop. 68 funding and the upcoming grant application. There is one application per basin and the Cuyama Basin does meet the criteria.

10. New Business

- a. No new business discussed.

11. Announcements

- a. Next meeting: October 28th, 2020
- b. Future meetings: November 18th, 2020

12. Adjournment - Meeting was adjourned by Director Yurosek at 4:57 p.m.

Respectfully Submitted,

**Brad DeBranch, Secretary
Cuyama Basin Water District**

Cuyama Basin Water District - 2020 Income, Expenses, & Budget Performance (As of 10/23/2020)

CATEGORY	CODE	DESCRIPTION	January	February	March	April	May	June	July	August	September	October	November	December	Total	Budget	Budget Remaining	% of Budget	
Income																			
	1000	2019 District Assessment	-	4,139.23	8,854.82	-	-	-	-	-	-	-	-	-	679,129.39	712,800.00	33,670.61	95%	
		2020 District Assessment	-	-	-	87,819.62	81,806.14	20,394.08	1,661.44	271.06	3,248.97	6,460.41	-	-	201,661.72	218,545.00	16,883.28	92%	
	1100	Interest - Savings/Money Market/Etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!	
	2000	Miscellaneous Payments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!
		Santa Barbara Co. Tax Bill (2018 Assessment)	-	-	-	4,794.30	6.51	993.20	-	-	-	-	-	-	-	7,309.56	7,086.69	(222.87)	103%
		Santa Barbara Co. Tax Bill (2019 Assessment)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!
		San Luis Obispo Co. Tax Bill (2018 Assessment)	221.28	-	-	-	134.22	38.42	36.82	-	-	-	-	-	-	430.74	429.99	(0.75)	100%
		San Luis Obispo Co. Tax Bill (2019 Assessment)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!
		Ventura Co. Tax Bill (2018 Assessment)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!
		Ventura Co. Tax Bill (2019 Assessment)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!
Total Income			221.28	4,139.23	8,854.82	92,613.92	81,946.87	21,425.70	1,698.26	271.06	3,248.97	6,460.41	-	-	209,402.02	226,061.68	16,659.66	93%	
Expense																			
	3000	Manager - General District	203.67	1,624.50	3,274.40	4,237.76	2,257.50	2,785.62	2,945.39	2,327.90	1,110.80	-	-	-	20,767.54	40,000.00	19,232.46	52%	
	3100	Accounting & Auditing Services	-	-	-	-	-	-	-	2,720.00	-	-	-	-	2,720.00	6,000.00	3,280.00	45%	
	3200	Bank Service Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	
	3300	Insurance	50.00	5,546.00	-	-	-	-	-	-	-	-	-	-	5,596.00	5,500.00	(96.00)	102%	
	3400	Legal Services	1,545.76	1,694.38	2,503.36	1,032.50	1,356.99	1,917.50	737.50	1,392.80	531.00	-	-	-	12,711.79	53,000.00	40,288.21	24%	
	4000	Manager - SGMA Activities	1,500.00	3,975.00	3,600.00	1,725.00	1,657.66	2,175.00	1,725.00	2,025.00	1,500.00	-	-	-	19,882.66	72,500.00	52,617.34	27%	
	5000	Data Collection	-	-	-	-	-	-	-	-	-	-	-	-	-	26,000.00	26,000.00	0%	
	6000	Technical Studies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!	
	7000	Groundwater Sustainability Plan (GSP) Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!	
	8000	Groundwater Sustainability Plan (GSP) Implementation	5,225.72	17,958.46	-	11,351.78	-	16,564.86	-	-	14,469.24	-	-	-	65,570.06	131,200.00	65,629.94	50%	
	9000	Miscellaneous Expenses	-	1,477.60	-	-	-	-	-	-	-	-	-	-	1,477.60	15,545.00	14,067.40	10%	
Total Expenses			8,525.15	32,275.94	9,377.76	18,347.04	5,272.15	23,442.98	5,407.89	8,465.70	17,611.04	-	-	-	128,725.65	349,745.00	221,019.35	37%	
Net Income			(8,303.87)	(28,136.71)	(522.94)	74,266.88	76,674.72	(2,017.28)	(3,709.63)	(8,194.64)	(14,362.07)	6,460.41	-	-	80,676.37	(123,683.32)			
Monthly Bank Balance (month end)			935,158.05	937,819.68	846,683.85	863,336.87	1,004,476.52	1,013,451.80	991,507.39	989,860.95	969,051.74	-	-	-					

Cuyama Basin Water District - YTD Budget Variance Report (As of 10/23/2020)

CATEGORY	DESCRIPTION	2020 Budget	Actual (YTD)	Budget Variance
Income				
	2020 District Acreage Assessment	\$218,545	\$201,662	-\$16,883
	Interest Earnings - Savings/Money Market/Etc.	\$0	\$0	\$0
	Miscellaneous Member Payments	\$7,517	\$7,740	\$224
	Total Income	\$226,061.68	\$209,402.02	-\$16,659.66
Expense				
	Manager - General District	\$40,000	20,767.54	-\$19,232
	Accounting & Auditing Services	\$6,000	2,720.00	-\$3,280
	Bank Service Charges	\$0	-	\$0
	Insurance	\$5,500	5,596.00	\$96
	Legal Services	\$53,000	12,711.79	-\$40,288
	Manager - SGMA Activities	\$72,500	19,882.66	-\$52,617
	Data Collection	\$26,000	-	-\$26,000
	Technical Studies	\$0	-	\$0
	Groundwater Sustainability Plan (GSP) Development	\$0	-	\$0
	Groundwater Sustainability Plan (GSP) Implementation	\$131,200	65,570.06	-\$65,630
	Miscellaneous Expenses	\$15,545	1,477.60	-\$14,067
	Total Expenses	\$349,745.00	\$128,725.65	-\$221,019.35
	Net Income	-\$123,683.32	\$80,676.37	\$204,359.69

Cuyama Basin Water District
Accounts Payable - Ready for Approval
October 2020

<u>Num</u>	<u>Date</u>	<u>Name</u>	<u>Account</u>	<u>Paid Amount</u>
1121	10/5/2020	Young-Wooldridge	2003562 - Valley Repub	
			3400 Legal	-\$531.00
TOTAL				-\$531.00
1122	10/20/2020	Provost & Pritchard Cons	2003562 - Valley Repub	
			3000 Manager - Gener	-\$1,110.80
			4000 Manager - SGMA	-\$1,500.00
TOTAL				-\$2,610.80
1123	10/23/2020	eki - environment & wate	2003562 - Valley Repub	
			8000 GSP Implementa	-\$14,469.24
TOTAL				-\$14,469.24



THE LAW OFFICES OF

A LIMITED LIABILITY PARTNERSHIP • EST. 1939
 1800 30TH STREET, FOURTH FLOOR
 BAKERSFIELD . CA. 93301

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 FACSIMILE: (661) 327-1087

CUYAMA BASIN WATER DISTRICT
 MATT KLINCHUCH, PC
 MANAGER- ASSESSOR-COLLECTOR
 1800 30TH STREET, SUITE 280
 BAKERSFIELD, CA 93301

September 30, 2020

Client ID 20308 SKK

Statement for period through September 30, 2020

Summary by Matter

Matter	Description	Prior Balance	Payments & Adjustments	Current Charges	Total Due
4	BOARD MEETINGS AND MATTERS (INCL. BROWN ACT)	\$1,357.00	-\$1,357.00	\$442.50	\$442.50
34	GROUNDWATER MANAGEMENT PLAN	\$767.01	-\$767.01	\$88.50	\$88.50
100	COSTS	\$6.29	-\$6.29	\$0.00	\$0.00

PRIOR STATEMENT BALANCE	\$2,130.30
TOTAL PAYMENTS AND ADJUSTMENTS	-\$2,130.30
CURRENT CHARGES	\$531.00
PAY THIS AMOUNT	\$531.00

Any Payments Received After 09/30/20 Will Appear on Your Next Statement

Visa, MasterCard and Discover accepted

A FINANCE CHARGE OF 1.5% WILL BE ADDED TO YOUR BALANCE 30 DAYS AFTER STATEMENT DATE

286 W. Cromwell Avenue
Fresno, CA 93711
(559) 449-2700
Fax (559) 449-2715

EST. 1968
**PROVOST &
PRITCHARD**
CONSULTING GROUP
An Employee Owned Company

Matthew Klinchuch
Cuyama Basin Water District
1800 30th Street, Suite 200
Bakersfield, CA 93301

October 20, 2020
Project: No: 02620-20-001
Invoice No: 81579

Project Name: 2020 CBWD-Manager

Client Project #:

Work this period included:

MAN: District administration. Follow-up on outstanding 2020 assessments. Prepare and attend via teleconference September Board meeting. Meeting follow-up items.

SGMA: GSA-CBWD letter on delegation and pumping fees. MA coordination with EKI. MA boundary review. Prepare and attend via teleconference September Board meeting.

Professional Services from September 1, 2020 to September 30, 2020

Phase: MAN Manager

Labor

	Hours	Rate	Amount	
Senior Engineer	6.00	150.00	900.00	
Project Administrator	.60	98.00	58.80	
Associate GIS Specialist	1.60	95.00	152.00	
Totals	8.20		1,110.80	
Total Labor				1,110.80
Total this Phase:				\$1,110.80

Phase: SGMA SGMA

Labor

	Hours	Rate	Amount	
Senior Engineer	10.00	150.00	1,500.00	
Totals	10.00		1,500.00	
Total Labor				1,500.00
Total this Phase:				\$1,500.00
Total this Invoice				<u>\$2,610.80</u>

Cuyama Basin Water District
Matt Klinchuch
Provost & Pritchard
1800 30th Street, Suite 280
Bakersfield, CA 93301

Invoice number B70069.01-06
Date 10/23/2020
Project: B70069.01

Professional services for the period June 27, 2020 through September 18, 2020

Consulting services associated with SGMA support, including participating in the GSP implementation process, Water District meetings, GSA meetings and associated technical conference calls. Please see attached Progress Summary Report (PSR) for additional details.

Professional Fees		Hours	Rate	Billed Amount
Anona L. Dutton	Officer & Chief Engineer-Scientist	1.50	286.00	429.00
David Leighton	Senior II, Engineer-Scientist	2.25	230.00	517.50
Jeffrey R. Shaw	Senior II, Engineer-Scientist	48.00	230.00	11,040.00
Drew S. Bost	Engineer-Scientist, Grade 5	6.25	129.00	806.25
Jaclyn A. Catania	CADD Operator / GIS Analyst	4.25	118.00	501.50
Ruy Barretto	Engineer-Scientist, Grade 6	4.75	113.00	536.75
Professional Fees subtotal		67.00		13,831.00

Reimbursables	Units	Rate	Cost Amount	Multiplier	Billed Amount
CAD Time/\$20/hr	4.25	20.00	85.00		85.00
Communication Fee - 4%	13,831.00	0.04	553.24		553.24
Reimbursables subtotal			638.24		638.24

Invoice total 14,469.24

Please refer to the EKI Project Number on all checks and correspondence.

PROGRESS SUMMARY REPORT #6

Technical Support to the District Regarding Proposed GSP Management Actions
Cuyama Basin Water District

CLIENT: **Cuyama Basin Water District**
CLIENT PM: Matt Klinchuch, P.E.
EKI PROJECT #: B70069.01
EKI PROJ. MANAGER: Jeff Shaw
EKI INVOICE NO: B70069.01-06

PROGRESS SUMMARY REPORT #: 6
PERIOD BEGINNING: 27 Jun 2020
PERIOD ENDING: 18 Sep 2020
PREPARED BY: Jeff Shaw

WORK COMPLETED THIS PERIOD:

- a) Attend WD meetings via videocall (7/22, 8/26);
- b) AdHoc tech committee discussions (7/17, 8/03);
- c) GSA joint Board and SAC meeting re fees via videocall (8/13);
- d) Review & provide feedback on tasks allocated by GSA to District for AdHoc;
- e) Prepare maps of management areas and model elements driving differences between drawdown estimates which affect MA boundaries;
- f) Prepare maps of proposed operational (simplified) MA boundaries;
- g) Prepare & modify table of parcels located within and outside MAs;
- h) Prepare and provide GIS files (shapefiles and kmz format files);
- i) Prepare memorandum re funding criteria and opportunities under Proposition 68; and
- j) General management & communication with District.

NOTE: Note that meeting attendance has been remote-only due to COVID-19 restrictions.

WORK PLANNED OR OR IN-PROGRESS FOR NEXT PERIOD:

- a) Complete QA/QC review of water level and water quality data as they become available to support District's annual reporting in 2021;
- b) Prepare recommendations for District regarding GSP implementation, management area designation, and GSA proposed model revisions;
- c) Assist the District with priorities for upcoming funding opportunities; and
- d) Support the District regarding task delegation from the GSA.

OTHER COMMENTS:

TABLE 1
Project Invoice Summary - 2020 Authorization

Task No.	Description	Budget	Billed This Period (a)	Billed Prior Periods (b)	Billed to Date	Budget Remaining	Est. % Compl.	Projected Cost to Complete	Projected Variance
1	Assist District with 2020 GSP Implementation, Projects, and Management Actions	\$ 78,200	\$11,511.48	\$ 30,250	\$ 41,762	\$ 36,438	53%	\$ 36,438	\$ -
2	Meetings, Communications, and Project Management	\$ 53,000	\$ 2,957.76	\$ 14,907	\$ 17,865	\$ 35,135	34%	\$ 35,135	\$ -
3	Review Draft 2020 GSP Annual Report	\$ 17,800	\$ -	\$ 718	\$ 718	\$ 17,082	100%	\$ -	\$ 17,082
TOTALS:		\$149,000	\$14,469.24	\$ 45,875	\$ 60,344	\$ 88,656	<====>	\$ 71,573	\$ 17,082

Notes

- (a) Amounts listed in Table 1 (other than the current billing period) are rounded to the nearest dollar. Values in parentheses are negative.
- (b) Column lists prior billing for 2020 authorization (NTE \$149,000) only.

UNIQUE_ID		Assessed Amount	Payment Received	Amount Paid
CBWD	1	61.34	4/13/2020	61.34
CBWD	2	5,646.71	5/4/2020	5,646.71
CBWD	3	2,827.61		
CBWD	4	35,035.98	4/30/2020	35,035.98
CBWD	5	6.50		
CBWD	6	34.40	4/13/2020	34.40
CBWD	7	5.19	4/13/2020	5.19
CBWD	8	16.52	4/13/2020	16.52
CBWD	9	625.75	4/22/2020	625.75
CBWD	10	5.96		
CBWD	11	10.60		
CBWD	12	30,479.81	5/27/2020	31,798.96
CBWD	13	41,649.87	5/27/2020	41,649.87
CBWD	14	521.50		
CBWD	15	247.94	5/15/2020	247.94
CBWD	16	34.40	4/13/2020	34.40
CBWD	17	17,315.30	6/15/2020	17,315.30
CBWD	18	8.79	4/13/2020	8.79
CBWD	19	390.44	4/30/2020	390.44
CBWD	20	4.92	8/12/2020	4.92
CBWD	21	37.35	4/13/2020	37.35
CBWD	23	8.94		
CBWD	24	36.39		
CBWD	25	236.78	4/30/2020	236.78
CBWD	26	52.77		
CBWD	28	424.61	4/22/2020	424.61
CBWD	29	154.57		
CBWD	30	266.14	8/12/2020	266.14
CBWD	31	14.57	4/22/2020	14.57
CBWD	32	17.20	4/13/2020	17.20
CBWD	33	8.60		
CBWD	34	12,310.64	4/30/2020	12,310.64
CBWD	35	19.29		
CBWD	36	2.06		
CBWD	37	120.40	4/13/2020	120.40
CBWD	38	37.07		
CBWD	39	4.89	4/22/2020	4.89
CBWD	40	8.68		
CBWD	41	17.20		
CBWD	42	275.20		
CBWD	43	1.03		
CBWD	44	8.79		
CBWD	45	17.03	4/22/2020	17.03
CBWD	46	460.68	4/13/2020	460.68
CBWD	47	404.75	4/13/2020	404.75

 Assessment Less than \$15

2020 Assessment Payment Summary
Through (10/23/2020)

UNIQUE_ID		Assessed Amount	Payment Received	Amount Paid
CBWD	48	276.42	4/13/2020	276.42
CBWD	49	46.64	5/15/2020	46.64
CBWD	50	17.20	4/13/2020	17.20
CBWD	51	30.82		
CBWD	52	321.09		
CBWD	53	16.19	5/20/2020	16.19
CBWD	54	34.40	4/13/2020	34.30
CBWD	55	240.80	5/20/2020	240.80
CBWD	56	14.48		
CBWD	57	123.73		
CBWD	58	34.40	7/22/2020	34.40
CBWD	59	1,001.40	4/30/2020	1,001.40
CBWD	60	50.86	4/13/2020	50.86
CBWD	61	15.72	4/22/2020	15.72
CBWD	62	21.78	4/22/2020	21.78
CBWD	63	17.20	9/8/2020	17.20
CBWD	64	18.21		
CBWD	65	1,106.08	7/22/2020	1,106.08
CBWD	66	392.39	7/22/2020	392.39
CBWD	67	31.76	4/13/2020	31.76
CBWD	68	103.20	4/13/2020	103.20
CBWD	69	128.57	7/22/2020	128.57
CBWD	70	2.74		
CBWD	71	4.95		
CBWD	72	3.56		
CBWD	73	3.75		
CBWD	74	1,827.36	9/30/2020	1,827.36
CBWD	75	6.43	4/30/2020	6.43
CBWD	76	588.75	9/8/2020	588.75
CBWD	77	132.29		
CBWD	78	3,026.01	10/1/2020	3,026.01
CBWD	79	12.38		
CBWD	80	22.13	4/30/2020	22.13
CBWD	81	457.11		
CBWD	82	10.75		
CBWD	83	17.08	4/22/2020	17.08
CBWD	84	5,099.94	4/30/2020	5,099.94
CBWD	85	51.60	10/1/2020	51.60
CBWD	86	6.94		
CBWD	87	4.30	4/22/2020	4.30
CBWD	88	32.77	5/4/2020	32.77
CBWD	90	0.87		
CBWD	91	32.77		
CBWD	92	42.91		
CBWD	93	225.36		

2020 Assessment Payment Summary
Through (10/23/2020)

UNIQUE_ID		Assessed Amount	Payment Received	Amount Paid
CBWD	94	8.80		
CBWD	95	66.14	6/30/2020	66.14
CBWD	96	145.95		
CBWD	97	7,681.30		
CBWD	98	14,476.74	4/30/2020	14,476.74
CBWD	99	3,411.01	5/27/2020	3,411.01
CBWD	100	8.73		
CBWD	101	420.89		
CBWD	102	7.61		
CBWD	103	157.83	4/22/2020	157.83
CBWD	104	609.38	4/22/2020	609.38
CBWD	105	2.57		
CBWD	106	12.38	4/13/2020	12.38
CBWD	107	154.80	4/13/2020	154.80
CBWD	108	51.60	4/13/2020	51.60
CBWD	109	31.90	4/13/2020	31.90
CBWD	110	8.79		
CBWD	111	2,547.89	10/1/2020	2,547.89
CBWD	112	499.99	10/1/2020	499.99
CBWD	113	137.53		
CBWD	114	8.75	4/13/2020	8.75
CBWD	115	7.13	4/22/2020	7.13
CBWD	116	17.20		
CBWD	117	2.35		
CBWD	118	10.54	4/13/2020	10.54
CBWD	119	17.20		
CBWD	120	31.67	6/12/2020	31.67
CBWD	121	63.16		
CBWD	122	4.30		
CBWD	123	17.02		
CBWD	124	25.88		
CBWD	125	17.73	4/22/2020	17.73
CBWD	126	327.82	6/12/2020	327.82
CBWD	127	0.98		
CBWD	128	412.60	6/12/2020	412.60
CBWD	129	149.73	6/12/2020	149.73
CBWD	130	8.60		
CBWD	131	17.59	4/13/2020	17.59
CBWD	132	44.52	4/13/2020	44.52
CBWD	133	69.27	4/22/2020	69.27
CBWD	134	815.66	9/30/2020	815.66
CBWD	135	17.20	4/13/2020	17.20
CBWD	136	130.59	4/22/2020	43.00
CBWD	137	13.75		
CBWD	138	585.39	6/12/2020	585.39

2020 Assessment Payment Summary
Through (10/23/2020)

UNIQUE_ID	Assessed Amount	Payment Received	Amount Paid
CBWD 139	43.00	4/13/2020	43.00
CBWD 140	10.13		
CBWD 141	1.80		
CBWD 142	249.42	4/13/2020	249.42
CBWD 143	134.46	4/22/2020	134.46
CBWD 144	67.94	4/13/2020	67.94
CBWD 145	17.20	4/13/2020	17.20
CBWD 146	104.82		
CBWD 147	5,528.18	4/30/2020	5,528.18
CBWD 148	4,921.48	4/30/2020	4,921.48
CBWD 149	85.23	4/22/2020	85.23
CBWD 150	52.78	4/13/2020	52.78
CBWD 151	34.23		
CBWD 152	2.63		
CBWD 153	334.92	10/1/2020	334.92
CBWD 154	17.20	4/13/2020	17.20
CBWD 155	2,565.96		
CBWD 156	4.95		
CBWD 157	23.65	4/22/2020	23.65
CBWD 158	12.99		
CBWD 159	34.40	5/4/2020	34.40
CBWD 160	17.20		
CBWD 161	1,505.43	6/12/2020	1,505.43
CBWD 162	8.25		
CBWD 163	3.87		
CBWD 164	1.15		
CBWD 165	4.30		
CBWD 166	244.27		
CBWD 167	465.98		
CBWD 168	8.61		
CBWD 169	2,032.66	4/22/2020	2,032.66
CBWD 170	8.22	4/22/2020	8.22
CBWD 171	624.46	4/30/2020	624.46

Dollars Received 201,661.72
93%
Payments Received 86
73%

**2020 Assessment Payment Summary
Through (10/23/2020)**

UNIQUE_ID		Assessed Amount	Payment Received	Amount Paid
CBWD	3	2,827.61		
CBWD	14	521.50		
CBWD	97	7,681.30		
CBWD	155	2,565.96		
CBWD	167	465.98		

14,062.35

6% Total Budget

Cuyama Basin Water District

Financial Statements

December 31, 2019

DRAFT

C O N T E N T S

Page(s)

Independent Auditors' Report

1 - 2

Management's Discussion and Analysis (Required Supplementary Information)

3 - 6

Financial Statements

Statement of net position

7

Statement of revenues, expenses, and changes in net position

8

Statement of cash flows

9

Notes to financial statements

10 - 13

Independent Auditors' Report

Board of Directors
Cuyama Basin Water District
Bakersfield, California

We have audited the accompanying financial statements of the Cuyama Basin Water District as of and for the year ended December 31, 2019, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Cuyama Basin Water District as of December 31, 2019, and the changes in its financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 6 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

BARBICH HOOPER KING
DILL HOFFMAN
Accountancy Corporation

Bakersfield, California
October 28, 2020

Cuyama Basin Water District

Management's Discussion and Analysis

As management of the Cuyama Basin Water District ("District"), we offer readers of the District's financial statements this narrative overview and analysis of the District's financial performance for the year ended December 31, 2019. Please read it in conjunction with the District's financial statements, which follow this section.

Financial and Operating Highlights

The primary tasks of the District in the 2019 Fiscal Year, the third year of operations, were:

- To fund the District's annual operations.
- To fund activities associated with the Cuyama Basin Groundwater Sustainability Agency (CBGSA) and development of a Groundwater Sustainability Plan (GSP) to comply with the SGMA legislation.

As of December 31, 2019 the District had made significant progress in accomplishing these goals.

Overview of the Financial Statements

This annual financial report includes the management's discussion and analysis, the independent auditors' report, and the basic financial statements of the District. The financial statements also include notes that explain in more detail some of the information in the financial statements.

Required Financial Statements

The financial statements of the District report information using accounting methods similar to those used by private sector companies. These statements offer short and long-term financial information about its activities. The Statement of Net Position includes all of the District's assets and liabilities and provides information about the nature and amounts of investments in resources (assets) and the obligations to the District's creditors (liabilities). It also provides the basis for evaluating the capital structure of the District and assessing its liquidity and financial flexibility.

All of the revenues and expenses for the year ended December 31, 2019 are accounted for in the Statement of Revenues, Expenses and Changes in Net Position. This statement can be used to determine whether the District has successfully recovered all of its costs through its user fees and other charges, and to determine its profitability and its creditworthiness.

The final required financial statement is the Statement of Cash Flows. This statement reports cash receipts, cash payments, and net changes in cash resulting from operations, financing, and investing activities, and provides answers to questions such as where did cash come from, what was cash used for, and what was the change in the cash balance during the reporting period.

Financial Analysis of the District

The Statement of Net Position, and the Statement of Revenues, Expenses and Changes in Net Position report information about the District's activities during the year. These two statements report the net position of the District and the changes in it.

Management's Discussion and Analysis

Table A presents a summary of the District's statement of net position.

Table A
Condensed Statements of Net Position
December 31, 2019 and 2018

	<u>2019</u>	<u>2018</u>	<u>Dollar Change</u>	<u>Percentage Change</u>
ASSETS				
Current assets	<u>\$ 997,200</u>	<u>\$ 564,229</u>	<u>\$ 432,971</u>	76.7%
LIABILITIES AND NET POSITION				
Current liabilities	\$ 85,919	\$ 33,610	\$ 52,309	155.6%
NET POSITION				
Unrestricted	<u>911,281</u>	<u>530,619</u>	<u>380,662</u>	71.7%
	<u>\$ 997,200</u>	<u>\$ 564,229</u>	<u>\$ 432,971</u>	76.7%

The increase in current assets of \$432,971, or 76.7%, at December 31, 2019 is largely due to the decreased costs associated with the administration of the Cuyama Basin Groundwater Sustainability Agency (GSA). The GSA began incurring costs late in 2017 and into 2018 that were paid by the District in 2018.

The increase in current liabilities of \$52,309, or 155.6%, at December 31, 2019 is also tied to the GSA activities and timing for paying invoices. In 2019, accruals for the invoices related to technical support for reviewing the GSP from the District's technical consultant were necessary.

The increase in unrestricted balance of \$380,662, or 71.7% at December 31, 2019 is due to grant funding received through a Sustainable Groundwater Planning (SGMA) Grant by the Cuyama Basin GSA that offset some of the District's costs associated with GSA administration.

Management's Discussion and Analysis

While the Statement of Net Position shows the change in financial position of the District, the Statement of Revenues, Expenses and Changes in Net Position provides answers as to the nature and source of these changes.

Table B presents a summary of the District's statement of revenues, expenses and changes in net position.

Table B
Condensed Statements of Revenues, Expenses and Changes in Net Position
For the Years Ended December 31, 2019 and 2018

	<u>2019</u>	<u>2018</u>	<u>Dollar Change</u>	<u>Percentage Change</u>
Operating revenues	\$ 710,380	\$ 967,601	\$ (257,221)	(26.6%)
Operating expenses	(329,718)	(862,693)	(532,975)	(61.8%)
Operating income	<u>380,662</u>	<u>104,908</u>	<u>275,754</u>	262.9%
Nonoperating income	<u>-</u>	<u>2,950</u>	<u>(2,950)</u>	(100.0%)
Change in net position	380,662	107,858	272,804	252.9%
Net position, at beginning of year	<u>530,619</u>	<u>422,761</u>	<u>107,858</u>	25.5%
Net position, at end of year	<u><u>\$ 911,281</u></u>	<u><u>\$ 530,619</u></u>	<u><u>\$ 380,662</u></u>	71.7%

The decrease in operating revenues of \$257,221, or 26.6%, during the year ended December 31, 2019 are attributed to decreased land-based assessments for the 2019 year associated with the Proposition 218 budget passed in 2017.

The decrease in operating expenses of \$532,975, or 61.8%, during the year ended December 31, 2019 is attributed to member agency costs associated with the Cuyama Basin GSA. Due to the CBGSA successfully receiving grant funding for developing and finalizing the GSP, member agencies were not subject to invoicing to pay CBGSA costs in the 2019 year.

Management's Discussion and Analysis

Budgetary Comparison

The District prepares and adopts a budget annually, however, it is tied to a Proposition 218 election that set maximums in each year. The Proposition 218 is used as a guideline for the regulation of expenses and generally serves as the basis from which assessments are determined and approved.

Table C
Budget Versus Actual Comparison
For the Year Ended December 31, 2019

	<i>2019 Actual</i>	<i>2019 Budget</i>	<i>Dollar Change</i>	<i>Percentage Change</i>
Operating revenues	\$ 710,380	\$ 712,800	\$ (2,420)	(0.3%)
Operating expenses	(329,718)	(712,800)	(383,082)	(53.7%)
Change in net position	<u>\$ 380,662</u>	<u>\$ -</u>		

Capital Assets

During the year ended December 31, 2019, the District did not purchase or receive capital assets.

Debt Service Requirements

No debt was issued or outstanding during the year ended December 31, 2019.

Contacting the District's Management

This financial report is designed to provide our customers and creditors with a general overview of the District's finances and to demonstrate the District's accountability for the money it receives. If you have questions about this report or need additional information, contact Matt Klinchuch, General Manager of Cuyama Basin Water District, 1800 30th Street, Suite 280, Bakersfield, California 93301.

Cuyama Basin Water District

***Statement of Net Position
December 31, 2019***

ASSETS

Current Assets

Cash and cash equivalents	\$ 934,937
Accounts receivable, landowners	<u>62,263</u>
	<u><u>\$ 997,200</u></u>

LIABILITIES AND NET POSITION

Current Liabilities

Accounts payable and accrued liabilities	\$ 85,919
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Net Position

Unrestricted	<u>911,281</u>
	<u><u>\$ 997,200</u></u>

See Notes to Financial Statements.

Cuyama Basin Water District

***Statement of Revenues, Expenses, and Changes in Net Position
For the Year Ended December 31, 2019***

Revenues:

Assessments to landowners	\$ 710,380
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Operating expenses:

Technical studies	185,252
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Legal and accounting	56,999
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General and administrative	87,467
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	<u>329,718</u>
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Operating income	<u>380,662</u>
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Change in net position	380,662
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<i>Net position, at December 31, 2018</i>	<u>530,619</u>
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<i>Net position, at December 31, 2019</i>	<u><u>\$ 911,281</u></u>
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See Notes to Financial Statements.

Cuyama Basin Water District

***Statement of Cash Flows
For the Year Ended December 31, 2019***

Cash flows from operating activities:

Cash receipts from assessments	\$ 674,178
Cash payments to suppliers for goods and services	<u>(277,409)</u>

Net cash provided by operating activities	<u>396,769</u>
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<i>Net increase in cash and cash equivalents</i>	396,769
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<i>Cash and cash equivalents at December 31, 2018</i>	<u>538,168</u>
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<i>Cash and cash equivalents at December 31, 2019</i>	<u><u>\$ 934,937</u></u>
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***Reconciliation of operating income to net cash
provided by operating activities:***

Operating income	\$ 380,662
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***Adjustments to reconcile operating income to
net cash provided by operating activities:***

Changes in operating assets and liabilities:

Accounts receivable	(36,202)
Accounts payable	<u>52,309</u>

Net cash provided by operating activities	<u><u>\$ 396,769</u></u>
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See Notes to Financial Statements.

Cuyama Basin Water District

Notes to Financial Statements

Note 1. Nature of Activities and Summary of Significant Accounting Policies

The reporting entity:

As a result of extended drought in California and diminishing surface water supplies, the State of California began proposing and developing comprehensive groundwater legislation to better manage groundwater. The California State Legislature passed and the Governor signed the “Sustainable Groundwater Management Act (“SGMA”) on September 16, 2014, which became effective January 1, 2015.

The Cuyama Basin Water District (the District) is a California water district formed pursuant to Division 13 of the California Water Code for the primary purpose of operating on behalf of agricultural interests for compliance with SGMA. The District landowners approved the formation of the District on February 28, 2017, and began operations effective March 13, 2017. The District encompasses an area of approximately 83,000 acres within the Santa Barbara, San Luis Obispo, and Ventura Counties, and is located in the Cuyama Valley. The District does not have a contracted surface water supply from State or Federal supplies.

The District joined a joint power agency (JPA) effective June 6, 2017. The JPA, the Cuyama Basin Groundwater Sustainability Agency (CBGSA), serves as the groundwater sustainability agency for the Cuyama Valley Groundwater Basin as required by the SGMA. Under the CBGSA, a groundwater sustainability plan (GSP) will be implemented as required to achieve a sustainable yield of the Cuyama Valley Groundwater Basin.

Management and Board of Directors:

The District is governed by a Board of Directors, which elects a President and Vice-President, whose terms are established by the Board of Directors from time to time as necessary.

Basis of accounting and financial reporting:

The accompanying financial statements have been prepared on the accrual basis of accounting, in conformity with the uniform system of accounts prescribed for water districts by the Controller of the State of California. Revenues are recognized when earned and expenses are recognized when incurred regardless of the timing of cash payments or receipts.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund’s principal ongoing operations. Revenues and expenses not meeting this definition are reported as nonoperating.

When the District has both unrestricted and restricted resources available for District purposes, it is the District’s practice to first expend restricted resources, subsequently utilizing unrestricted resources as needed. During the year ended December 31, 2019, there were no restricted resources.

Notes to Financial Statements

The District utilizes a net position presentation in accordance with GASB Statement No. 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments*, as amended by GASB Statement No. 63, *Financial Reporting of Deferred Outflows or Resources, Deferred Inflows of Resources, and Net Position*. Net position is categorized as invested in capital assets, net of related debt, restricted components of net position, and unrestricted components of net position. These categories are defined as follows:

Net investment in capital - This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and the deferred outflow of advanced refunding of bonds, reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of invested in capital assets, net of related debt. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

Restricted components of net position - This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported.

Unrestricted components of net position - This component of net position is the net amount of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position

Fund accounting:

The District is accounted for as an enterprise fund. Enterprise funds are set up to account for the acquisition and operation of government facilities and services that are intended to be primarily (over 50%) self-supported by user charges. Enterprise funds are required when any one of the three criteria are met: the activity of the fund is financed by debt secured by a pledge of fee revenue, laws require collection fees adequate to recover costs, or pricing policies are established to produce fees that recover costs.

Use of estimates:

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Notes to Financial Statements

Cash and cash equivalents:

For purposes of reporting cash flows, the District considers cash equivalents to be all highly liquid debt instruments purchased with an original maturity of three months or less. At December 31, 2019, cash and cash equivalents include amounts deposited with banks.

Custodial credit risk:

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the District will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g. broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and the District's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits, other than the following provisions for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total deposited by the public agencies. California law also allows financial institutions to secure governmental deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. At December 31, 2019, the District had no risk associated with custodial assets.

Cash flows:

GASB Statement No. 9, *Reporting of Cash Flows for Proprietary and Nonexpendable Trust Funds and Governmental Entities that Use Proprietary Fund Accounting*, states for purposes of preparing the statement of cash flows, all transactions not classified as capital and related financing activities or investing activities are classified as operating activities.

Accounts receivable:

The District considers accounts receivable to be fully collectable. Charges to landowners that are uncollected after six months are considered delinquent. Consistent with established policy and the Water Code, the District can initiate collection assessments through the landowners' respective property tax bill through the county assessor's office. There were delinquent accounts of \$33,781 as of December 31, 2019.

Concentration of credit risk:

Credit is extended, in the form of accounts receivable, to the landowners who are located within the District's boundaries.

Revenue recognition:

Income is derived from the levy of base service charges as determined by the election and approval of Proposition 218 by landowners in 2017.

Notes to Financial Statements

Note 2. Subsequent Events

The District has evaluated events and transactions subsequent to December 31, 2019, through the date of the independent auditors' report. As a result of the spread of COVID-19 (coronavirus), economic uncertainties have arisen which could potentially have a negative impact on the District's operations, though such impact is unknown at this time.

DRAFT

23 October 2020

MEMORANDUM

To: Matt Klinchuch, PE, Cuyama Basin Water District (CBWD)
Derek Yurosek, CBWD

From: Jeff Shaw, PG, CHg, EKI
John Fio, EKI
Dave Leighton, EKI

Subject: **Observations regarding the 13 October 2020 Cuyama Basin GSA Model Refinement Technical Forum**
Cuyama, California
(EKI B70069.01)

BACKGROUND

The Cuyama Basin GSA plans to use the Cuyama Basin Water Resources Model (“model”) as a primary tool providing (1) water budget information for upcoming annual and 5-year reports; and (2) the technical framework for pumping allocation decisions over the next 5-10 years. Improvements to model reliability are recommended when done in a cost-efficient manner, and when a clear practical benefit is realized from the investment. Model improvements thus should be prioritized, based on their potential to improve quantitative estimates of water use and groundwater storage changes. These estimates then can support real-world management decisions, bearing in mind that for every acre taken out of production the Cuyama Groundwater Basin incrementally loses the means to financially support implementation of the Groundwater Sustainability Plan (GSP).

On 13 October 2020, Woodard and Curran (WC) conducted a Technical Forum, which EKI attended, to discuss proposed model refinement plans. WC proposed five general categories of model refinements, which are critically discussed below in EKI’s recommended order of importance. In general, EKI considers proposed refinements to modeled inflows and outflows to be the highest priority because of their anticipated benefit to improving decisions on future pumping allocations.

MODEL REFINEMENTS PROPOSED IN THE TECHNICAL FORUM

1. Updates to Land and Water Use Data

This task updates model input data to include current data primarily for water budget reporting. The sensitivity analysis described in Chapter 2, Appendix C of the Cuyama GSP indicates that uncertainty in pumping data (or more accurately, water consumption) produces the largest uncertainty in modeled basin storage. Increasing the accuracy of estimated withdrawals and improving how pumping is implemented in the model should improve the accuracy of the calculated water budget, and thus improve the reliability of modeled changes in Basin groundwater storage. This in turn should result in more realistic pumping allocations. EKI therefore recommends that work under this task should focus on the following improvements.

- a) Improve model implementation of pumping. Pumping is represented in the model using a combination of specified wells and a more generalized approximation based on estimated water demand in the areas defined by the smallest model unit volumes (i.e., model elements). A more accurate representation of the timing, magnitude and extraction depths of pumping from wells likely would produce real benefits for management of pumping in the Basin.
- b) Improve modeled evapotranspiration. ET data are key inputs for model-estimated well extractions, and remotely sensed data tend to be more cost-efficient than other methods but must be checked for accuracy and adjusted as appropriate. Review of the areas where LandIQ METRIC ET estimates failed, based on ground-truthing with actual field data and anecdotal knowledge from Basin irrigators, could significantly improve implementation of ET calculations in the model.
- c) Confirm CIMIS station conditions. Baseline data derive from the Cuyama CIMIS station, which are used elsewhere in the basin. These data however incorporate certain assumptions regarding conditions at the station to be known and constant over time. Review and update of the CIMIS station conditions and support information would be useful to determine if it has been modified or its environment changed in a way that affects assumptions used to interpret its data.
- d) Consider distributed climate data collection. The Cuyama Basin is not uniform in elevation, slope, aspect, or other conditions. It may be useful to investigate ways to field-check and spatially adjust the New Cuyama CIMIS station data for topographic and slope-aspect variations that are more characteristic of other parts of the Basin. One approach could implement a few economical weather stations distributed in the Basin (basic models are available from various vendors which cost \$2,000 or less). These stations are limited relative to a full CIMIS station, but their lower cost allows data collection at a greater number of sites, which can be used to create methods that more accurately extrapolate the CIMIS data across the Basin.
- e) Review the Management Area boundary calculation technique. Use only active model nodes for calculating average drawdowns, then check against known pumping well locations and water demand based on cropping patterns to determine whether the results make sense.

2. Incorporating Monitoring Network Data into Model Calibration

Conduct a model post-audit. This task compiles monitoring network water level data and water quality data and updates the relative model input and post-processing data sets. A detailed comparison should be made between previously predicted Basin water levels (from 2017 to 2020), and the actual conditions represented by the monitoring data set. Based on the post-audit results, model improvements can be identified that improve the estimated magnitude and spatial distribution of pumping, its relationship to changes in groundwater storage, and locations where pumping could be curtailed to meet sustainability goals. Recommended analyses include:

- a) Conduct a spatial review of model error. Construct maps that show the distribution of model error across the basin. For example, calculate the difference between observed and model-calculated water levels at monitoring network wells, and contour these values for each model layer. Consider and review discrepancies in seasonal, annual, and longer-term projections, and by extension where discrepancies in groundwater consumption and storage depletion are greatest.

- b) Use recent data to identify redundancies in the monitoring network. More data at a greater frequency are now available than were available during initial model formulation. Cuyama Basin has an unusually large number of wells in its monitoring network (much more than the DWR recommended minimum). The model results can be utilized to critically evaluate the relative usefulness of data from individual monitoring wells. For example, updated hydrographs can be used to highlight well groups and their similarities, whereas scatterplots can explore correlation between wells to evaluate monitoring network redundancies. Problematic wells with missing or inaccurate well construction data, physical or legal barriers to data collection, and other issues are likely more effectively identified.

3. Review and Assessment of Model Hydrogeological Characterization

Review hydrogeology in order of influence on significant upcoming decisions. Understanding and implementation of the hydrogeological conceptual model is key to understanding groundwater occurrence and movement in the Basin. That said, the model never will be a perfect representation of the Basin. Primary questions to be addressed during the review include:

- a) Which hydrogeologic components have the greatest influence on the location and quantity of proposed pumping reductions;
- b) What is the mechanism by which they influence these management decisions; and
- c) What are their relative importance?

4. Enhancement of surface water and non-irrigated land surface representation

Focus on areas where recharge is likely to be significant. In the Cuyama Basin, it appears that deep percolation largely occurs in irrigated land areas and surface water alluvial channels. Improving estimates of deep percolation beneath non-irrigated lands thus will provide little benefit for managing agricultural water use and planned reductions in pumping.

Flash flooding also is likely to be important to basin recharge, and efforts to quantify this source of recharge may prove to be useful. Model output indicates that recharge within Water District lands is approximately 6,100 AFY (19%) of the 32,000 AFY of total runoff in the Basin. Investment in infrastructure to measure the true timing and magnitude of runoff that enters the Basin, and is potentially accessible to the Water District, could be useful. The actual runoff data would improve future model updates and thus improve model-calculated runoff and recharge from surface water infiltration. Moreover, the data could be examined to assess potential locations and benefits of Managed Aquifer Recharge flood-capture projects. The contribution of these projects to recharge beneath District lands could potentially be applied to offset currently anticipated reductions in future pumping.

5. Develop Decision Support Tool

This task may be premature. SGMA requires GSAs to establish monitoring networks to track basin conditions, and SMCs to demonstrate sustainability over the long term. A model decision support tool is not required to meet that mandate. The model has not yet been proven to be a reliable tool to support short-term (e.g., monthly) decisions related to groundwater demand and use, thus, efforts to develop a

decision support tool may be better spent on the tasks identified above. This task should be deferred for future consideration.

SUMMARY

Given the limited resources available to the Basin, efficient use of available funding is critical to effective groundwater management. EKI recommends that future data and model improvements emphasize the need to improve the reliability of the estimated magnitude and distribution of groundwater storage changes, and by extension the magnitude and distribution of pumping reductions required in the Basin. This can be achieved by focusing the model update activities on those features that reduce model uncertainty, and the effect of that uncertainty on the areas in the Basin of greatest groundwater use.

23 October 2020

MEMORANDUM

To: Matt Klinchuch, PE, Cuyama Basin Water District (CBWD)
Derek Yurosek, CBWD

From: Jeff Shaw, PG, CHg, EKI Environment & Water, Inc. (EKI)

Subject: Proposed Simplified “Operational” Management Area Boundaries
Cuyama, California
(B70069.01)

The Cuyama Basin GSA has proposed Management Areas within Cuyama Basin which are based on an average predicted piezometric surface drawdown contour of two feet per year over the next 50 years. The predictions were made using the Cuyama Basin Water Resources Model (CBWRM, or model) a finite-element transient groundwater flow model built on the IWFM platform.

Due to the nature of a modeled drawdown, the shape of the Management Areas are irregular and are controlled by numerous assumptions and characteristics of the model. Most of the proposed Management Area boundaries do not coincide with surface features or parcel boundaries.

Given that the Management Areas define parcels that will be subjected to reduced allocations of groundwater for agriculture and other uses, a clearly identifiable way to delineate and simplify which parcels will be subjected to pumping cutbacks (and which will not) is required.

Rather than expending scarce funds to survey and mark the model-derived contours, EKI, in discussion with the District, has identified various easily recognizable features such as roads, fence lines, and surface drainages in the Basin which can be used as proxies for the modeled drawdown contour lines.

These “operational” Management Area boundaries are intended to approximate the model-derived polygons, but in a simplified manner that coincides, wherever possible with parcel boundaries, and pre-existing and field-identifiable surface features.

A map of these proposed Operational Management Area boundaries is attached as Figure 1.

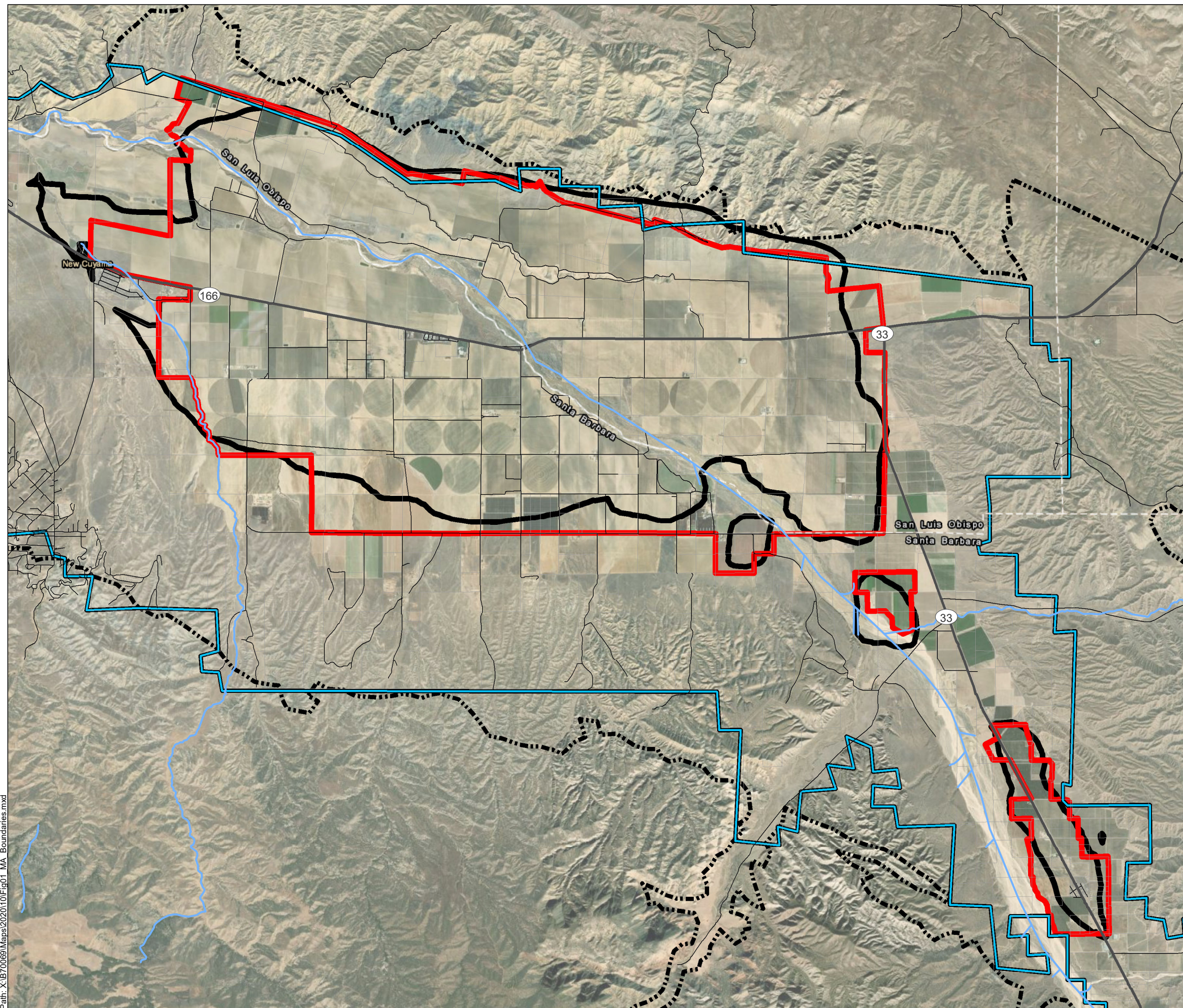
In general, the Operational Management Area boundaries were drawn using existing features in the following order of priority, where possible: (1) roads or tracks, (2) surface water drainage channels, and (3) fence lines or parcel boundaries.

Adoption of these Operational Management Area delineations (or other similarly-based lines) would allow easier and more efficient management of groundwater in Cuyama Basin.

Attachments

Figure 1 - Proposed Operational Management Area Boundaries, Cuyama Basin

Path: X:\B70069\Maps\202010\Fig01 MA Boundaries.mxd



Legend

- Stream
- Major Road
- Street
- Parcel Boundaries
- Cuyama Basin Water District
- Cuyama Basin
- Cuyama GSP Published MAs
- Proposed Operational Management Area Boundary

Notes

1. All locations are approximate.
2. Proposed Management Area boundaries shown are simplified polygons based on the 2-ft per year future drawdown contour as derived from Basin model output (see map Legend, above).

Sources

1. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Proposed Operational Management Area Boundary