



**SPECIAL NOTICE REGARDING  
CORONAVIRUS DISEASE 2019 (COVID-19)  
AND PARTICIPATION IN PUBLIC MEETINGS**

On March 4, 2020, Governor Newsom declared a State of Emergency resulting from the threat of COVID-19. On September 16, 2021, Governor Newsom signed Assembly Bill No. 361 into law. Assembly Bill No. 361 amends Government Code section 54953(e) by adding provisions for remote teleconferencing participation in meetings by members of a legislative body, without the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions. The San Bernardino Valley Municipal Water District adopted a resolution determining, by majority vote, that, as a result of the declared State of Emergency, a meeting in person would present imminent risks to the health or safety of attendees. Accordingly, it has been determined that all Board and Workshop meetings of the San Bernardino Valley Municipal Water District will be held pursuant to the Brown Act and will be conducted via teleconference. There will be no public access to the meeting venue.

**BOARD OF DIRECTORS WORKSHOP - ENGINEERING  
TUESDAY, FEBRUARY 8, 2022 – 2:00 P.M.**

**PUBLIC PARTICIPATION**

Public participation is welcome and encouraged. You may participate in the February 8, 2022, meeting of the San Bernardino Valley Municipal Water District online and by telephone as follows:

**Dial-in Info: (877) 853 5247 US Toll-free**

**Meeting ID: 753 841 573**

**PASSCODE: 3802020**

**<https://sbvmwd.zoom.us/j/753841573>**

If you are unable to participate online or by telephone, you may also submit your comments and questions in writing for the District's consideration by sending them to [comments@sbvmwd.com](mailto:comments@sbvmwd.com) with the subject line "Public Comment Item #" (insert the agenda item number relevant to your comment) or "Public Comment Non-Agenda Item". Submit your written comments by 6:00 p.m. on Monday, February 7, 2022. All public comments will be provided to the Chair and may be read into the record or compiled as part of the record.

**IMPORTANT PRIVACY NOTE: Participation in the meeting via the Zoom app is strongly encouraged. Online participants MUST log in with a Zoom account. The Zoom app is a free download. Please keep in mind: (1) This is a public meeting; as such, the virtual meeting information is published on the World Wide Web and available to everyone. (2) Should you participate remotely via telephone, your telephone number will be your "identifier" during the meeting and available to all meeting participants; there is no way to protect your privacy if you elect to call in to the meeting.**



**SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT**  
380 E. Vanderbilt Way, San Bernardino, CA 92408

**BOARD OF DIRECTORS WORKSHOP - ENGINEERING**

**AGENDA**

**2:00 PM Tuesday, February 8, 2022**

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**CALL TO ORDER**

Chairperson: Director Harrison

Vice-Chair: Director Hayes

**1) INTRODUCTIONS**

**2) PUBLIC HEARING**

- 2.1 Review and Discussion of Draft Redistricting Maps(Page 3)  
[Public Notice - Redistricting of Division Boundaries](#)  
[Staff Memo - Review and Discuss Draft Redistricting Maps](#)  
[Draft Redistricting Maps](#)

**3) PUBLIC COMMENT**

Any person may address the Board on matters within its jurisdiction.

**4) SUMMARY OF PREVIOUS MEETING**

- 4.1 Board of Directors' Workshop - Engineering - January 11, 2022 (Page 29)  
[Summary Notes BOD Workshop - Engineering 011122](#)

**5) DISCUSSION ITEMS**

- 5.1 Consider Valley District's Representative for the Western-San Bernardino and Santa Ana River Watermaster Committees, Respectively (Page 35)  
[Staff Memo - Consider Valley District's Representative for the Western-San Bernardino and Santa Ana River Watermaster Committees, Respectively](#)
- 5.2 Consider a Budgetary Amendment for the 2021 Water Supply Contingency Program to Meet the BVMWC In-Lieu Water Demand (Page 37)  
[Staff Memo - Consider a Budgetary Amendment for the 2021 Water Supply Contingency](#)

Program to Meet the BVMWC In-Lieu Water Demand

- 5.3 Consider Cost-Share with the City of Redlands for Well Rehabilitation and Improvements to the San Bernardino Avenue Well (Page 40)  
Staff Memo - Consider Cost-Share with the City of Redlands for Well Rehabilitation and Improvements to the San Bernardino Avenue Well  
Cost Estimate for Well Rehabilitation and Improvements to the San Bernardino Avenue Well

6) **FUTURE BUSINESS**

7) **ADJOURNMENT**

PLEASE NOTE:

Materials related to an item on this Agenda submitted to the Board after distribution of the agenda packet are available for public inspection in the District's office located at 380 E. Vanderbilt Way, San Bernardino, during normal business hours. Also, such documents are available on the District's website at [www.sbvmd.com](http://www.sbvmd.com) subject to staff's ability to post the documents before the meeting. The District recognizes its obligation to provide equal access to those individuals with disabilities. Please contact Melissa Zoba at (909) 387-9228 two working days prior to the meeting with any special requests for reasonable accommodation.

**NOTICE OF PUBLIC HEARING**  
**SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT**

**PUBLIC HEARING ON**  
**REDISTRICTING OF THE SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT**  
**BOARD OF DIRECTORS DIVISION BOUNDARIES AND DIVISION MAP(S).**

NOTICE is hereby given that the SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT (SBVMWD) Board of Directors will hold public hearings on the composition of divisions and proposed map(s) in accordance with Elections Code Section 22001. The purpose of the hearings will be to invite and solicit public comment on the draft division maps which are being published by the District prior to the SBVMWD Board of Directors considering adoption of a new division map.

The draft division maps to be discussed at the hearings will be published as part of each hearing agenda and also made available at [www.sbvmwd.com](http://www.sbvmwd.com).

Election Code Section 22000 requires SBVMWD to adjust division boundaries after each federal decennial census, and using that census as a basis, adjust the boundaries of its Board of Director divisions so that the divisions are, as far as practicable, equal in population and in compliance with Section 10301 of Title 52 of the United States Code. Additional information on SBVMWD's redistricting process and/or the public hearing may be obtained by contacting Melissa Zoba, Chief Information Officer at (909) 387-9228 or on the SBVMWD website located at [www.sbvmwd.com](http://www.sbvmwd.com).

The Board of Directors of SBVMWD will hold the hearings on the following dates at 2:00 p.m. or as soon after 2 p.m. as is reasonably practicable, via teleconference only.

Dates of the public hearings and potential hearings, if needed, are as follows:

Board of Directors Workshop – Engineering – February 8, 2022  
Board of Directors Workshop – Engineering – March 8, 2022  
Board of Directors Regular Meeting – April 5, 2022

To participate in the Public Hearing for the Redistricting of Division Boundaries please use the following meeting link ID and passcode. Online participants MUST log in with a Zoom account. The Zoom app is a free download. Telephone participants may dial in using the dial-in information provided:

<https://sbvmwd.zoom.us/j/753841573>

Dial-in Info: (877) 853 5247 US Toll-free

Meeting ID: 753 841 573

PASSCODE: 3802020

Written comments on the Redistricting of Division Boundaries may be submitted via email to [comments@sbvmwd.com](mailto:comments@sbvmwd.com) by 5:00 pm on February 7, 2022. Public comment may also be provided at the public hearing.

If you have any questions regarding Valley District's Redistricting of Division Boundaries or public hearing meeting, please contact Melissa Zoba at (909) 387-9228 or [melissaz@sbvmwd.com](mailto:melissaz@sbvmwd.com).



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**DATE:** February 8, 2022  
**TO:** Board of Directors' Workshop - Engineering  
**FROM:** Melissa Zoba, Chief Information Officer  
**SUBJECT:** Review and Discussion of Draft Redistricting Maps

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**Staff Recommendation**

Staff is requesting the Board discuss and provide input on three (3) draft redistricting maps developed by Redistricting Insights, LLC (RI). The draft maps for each division are included as attachments, however, the Board and members of the public are encouraged to examine the draft maps using an online mapping tool in Google Maps.

<https://www.google.com/maps/d/u/0/edit?mid=1x8Hld0Eqt-5FPdCOx5SQbls8U8nvT-f9&usp=sharing>

**Summary**

At the January 11<sup>th</sup> Board of Directors' Engineering Workshop, consultant Redistricting Insights (RI) provided an overview of the redistricting process and current requirements of rebalancing the District's division boundaries. A public hearing was conducted at this time to solicit input from the Board and members of the public. All comments were documented by staff and RI. Based on this input, three (3) draft maps were developed and will be presented to the Board for their review and consideration. RI will discuss each proposed map and address comments that were gathered at the January 11<sup>th</sup> workshop.

A public hearing will be conducted during today's workshop to receive further input by the Board and members of the public. Comments and public map submissions will be used to identify and further refine maps for subsequent consideration and approval by the Board.

Additionally, the following meeting schedule and resources have been developed to inform and facilitate the redistricting process.

**Public Hearing/Meeting Schedule**

- March 8, 2022 – Board of Directors Workshop – Engineering
- April 4, 2022 – Regular Meeting of the Board of Directors (adoption of final map and resolution)

**Public Outreach**

- Redistricting 2020 information, draft maps, and public input/submission resources can be found on the District’s website at [www.sbvmd.com](http://www.sbvmd.com)
- Online mapping tool (click [HERE](#))
- Social media channels
- Valley District press release
- Public hearing notification in nine (9) local newspaper outlets

**Submission of Comments and Maps by Members of the Public**

- **Written comments:** SBVMWD Administration office or via email to [melissaz@sbvmd.com](mailto:melissaz@sbvmd.com)
- **Oral comments:** During public hearings (Zoom/virtual only)
- **Public map submissions:** Download from District website and submit via mail or email

**Background**

California Elections Code Section 22000 requires each special district to adjust division boundaries after each decennial census, and using that census as a basis, adjust the boundaries of any divisions so that the divisions are, as far as practicable, equal in population.

Using the 2020 census data released in September 2021, staff calculated the total population of Valley District to be 709,704 which represents an increase of 48,158 from the 2010 census. Based on this total, the target population for each of the five divisions is 141,941. SB 594 provides that special districts with a regular election on the same day as the 2022 statewide general election must adopt adjusted division boundaries no later than April 17, 2022.

The table below shows the population and the difference from the target population for each division.

**Total Population = 709,704 per U.S. Census / Target Population for Each Division 141,941**

<b>Division:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Year 2010 Population:</b>	131,193 (19.8%)	135,350 (20.5%)	131,466 (19.8%)	125,530 (19.0%)	138,007 (20.9%)
<b>Year 2020 Population:</b>	140,193 (19.75%)	138,059 (19.45%)	150,532 (21.21%)	134,164 (18.90%)	146,756 (20.68%)
<b>Population Increase:</b>	9,000	2,709	19,066	8,634	8,749
<b>Target Deviation:</b>	-1,748	-3,882	+8,591	-7,777	+4,815
<b>Deviation Percentage:</b>	-0.25%	+0.55%	+1.21%	-1.10%	+0.68%

In November 2021, at the direction of the Board, an RFP was released to engage the services of a professional consultant to analyze and rebalance the division boundaries to reflect changes in population and demographics. In January 2022, following an analysis and interviews by staff, entering into an agreement with Redistricting Insights was recommended by staff and approved by the Board.

Three (3) public hearings are required and will be led by Redistricting Insights. A meeting schedule and public outreach resources have been developed to ensure the process will meet the requirements of the process within the timeline defined by SB594.

**Fiscal Impact**

There is no fiscal impact to this item as this is an informational presentation only.

**Attachments**

- 1) Draft Redistricting maps (3)

# REDISTRICTING SBVMWD

Draft Maps

*February, 2022*



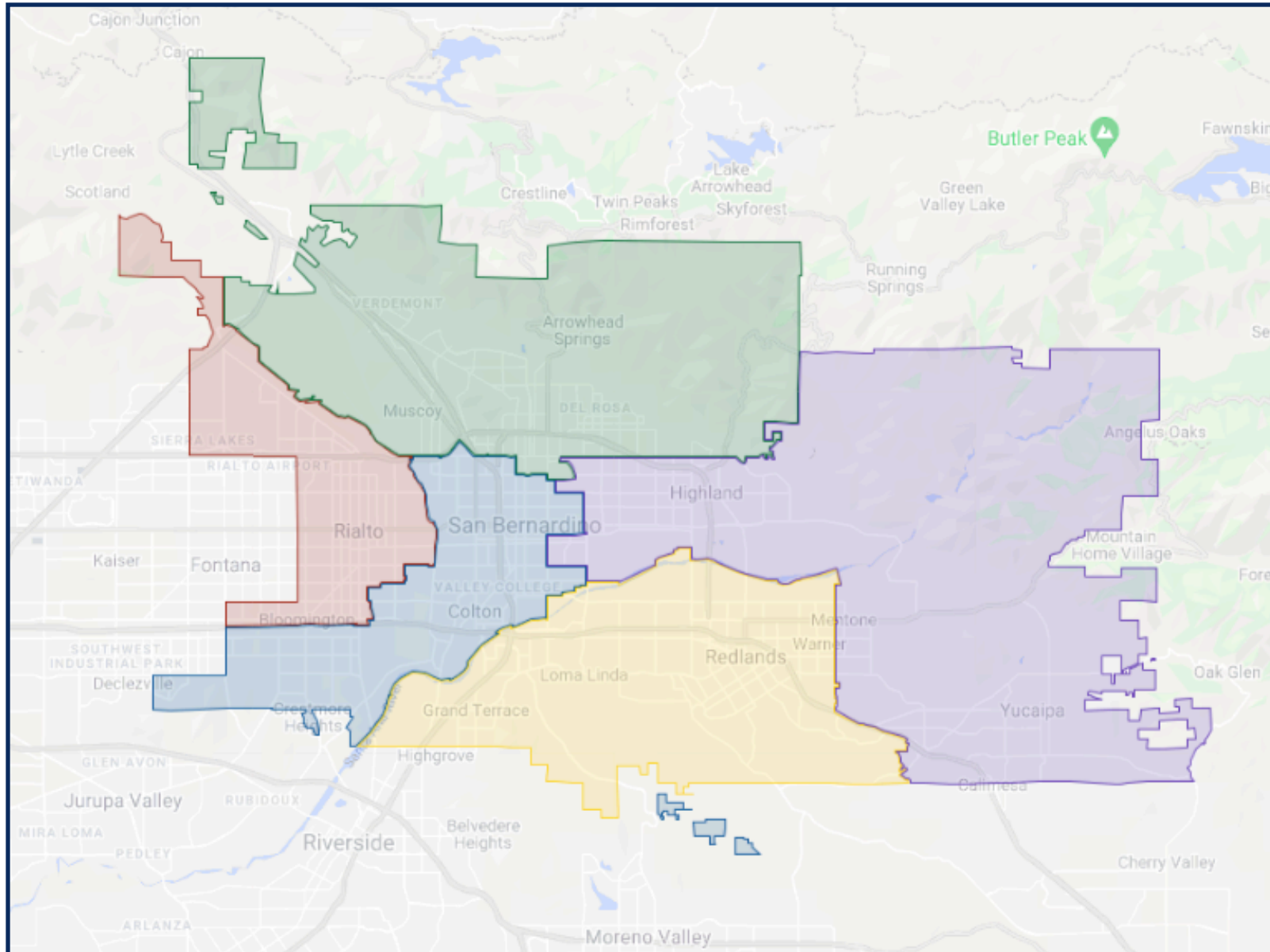
# REDISTRICTING SBVMWD DRAFT I

	DIVISION 1	DIVISION 2	DIVISION 3	DIVISION 4	DIVISION 5
2020 Census Count*	140,651	142,548	145,106	140,294	145,070
Deviation #	-2,083	-186	2,372	-2,440	2,336
Deviation %	-1.46%	-0.13%	1.66%	-1.71%	1.64%
2010 Census Count	131,081	139,174	125,950	130,596	135,997
2019 CVAP*	78,442	76,939	90,112	96,905	91,624
2010 CVAP	67,401	62,655	74,673	86,661	80,683

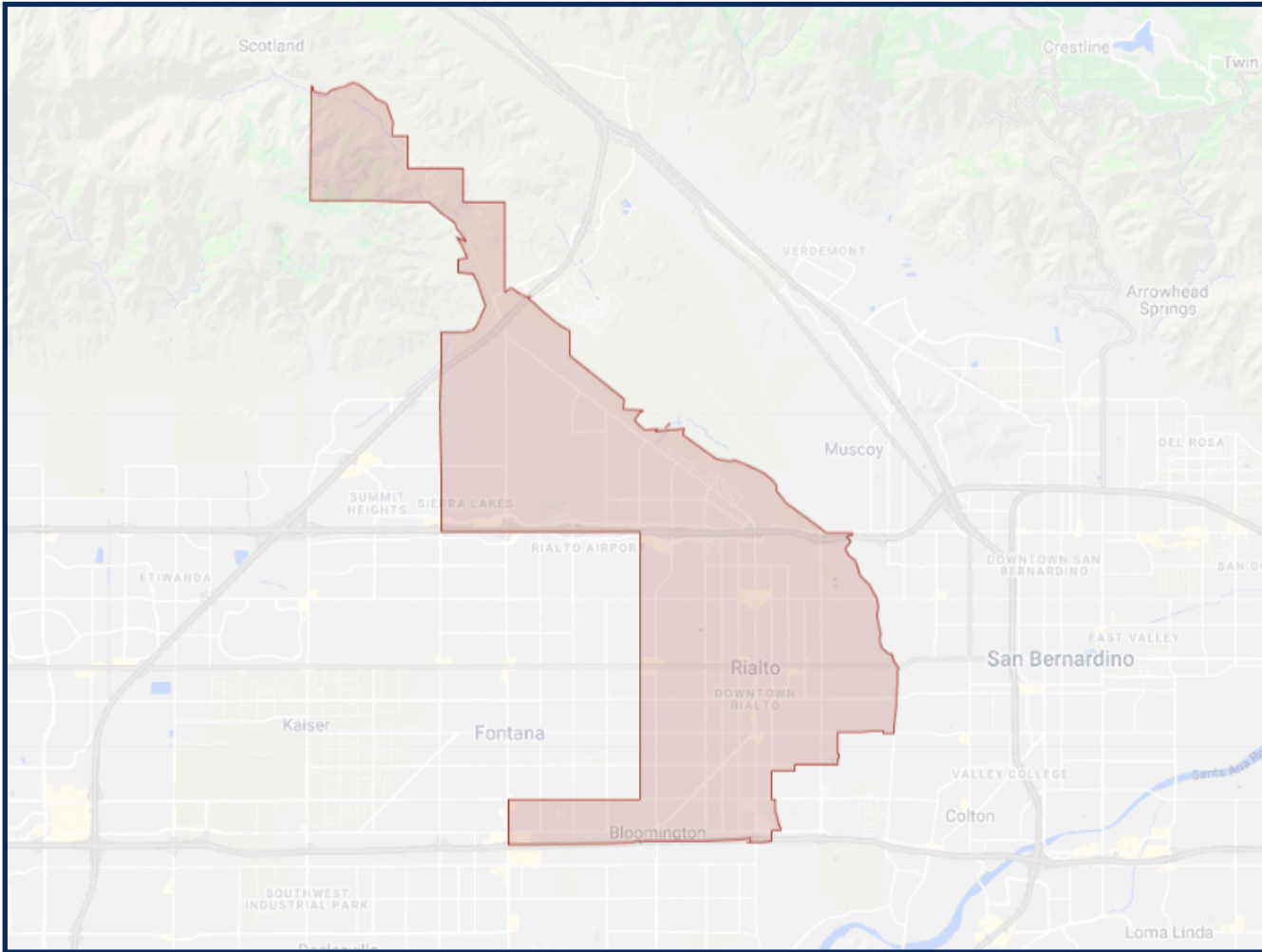


\*Adjusted for prisoner reallocation

# REDISTRICTING SBVMWD DRAFT I

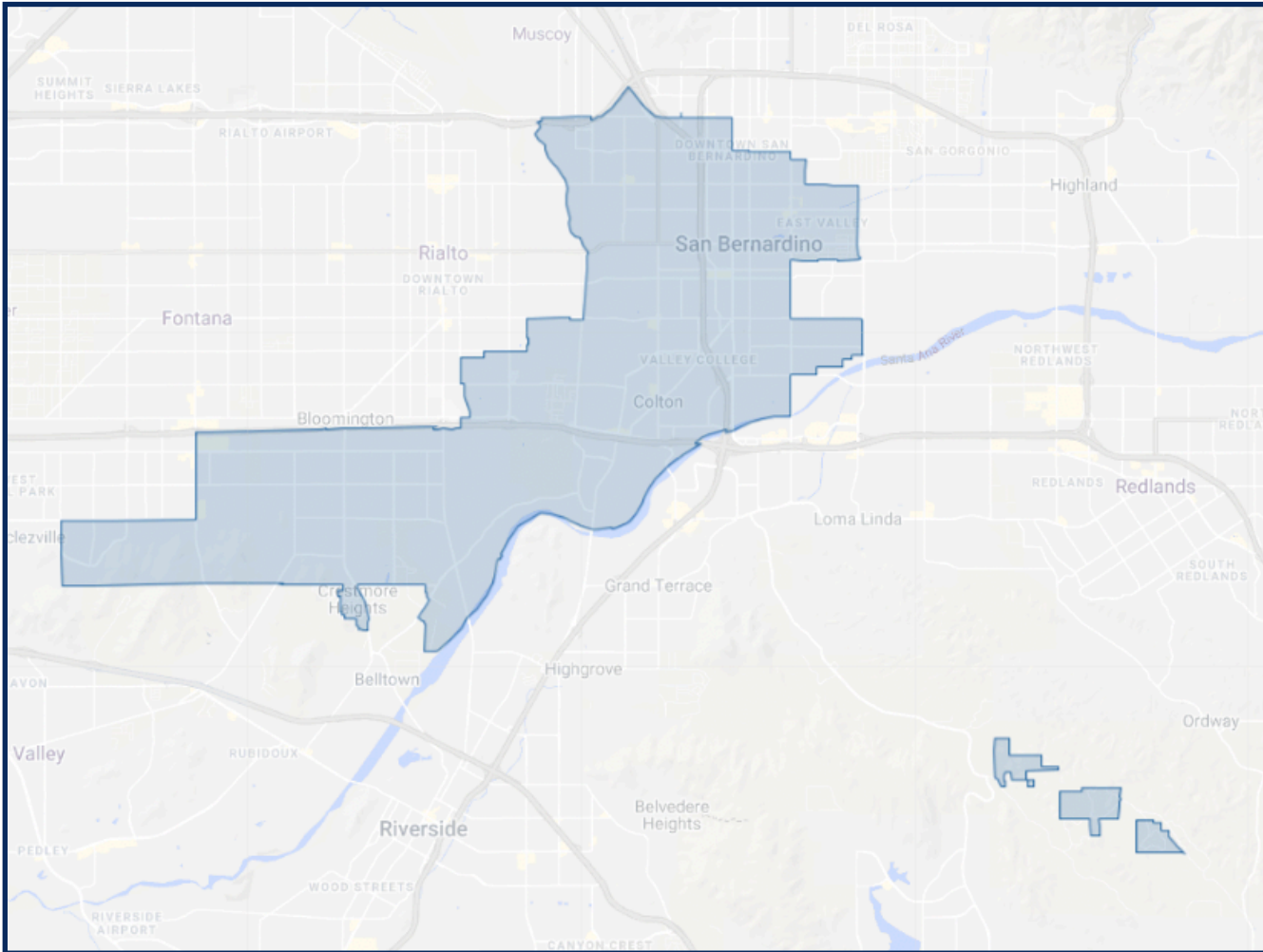


## DIVISION 1



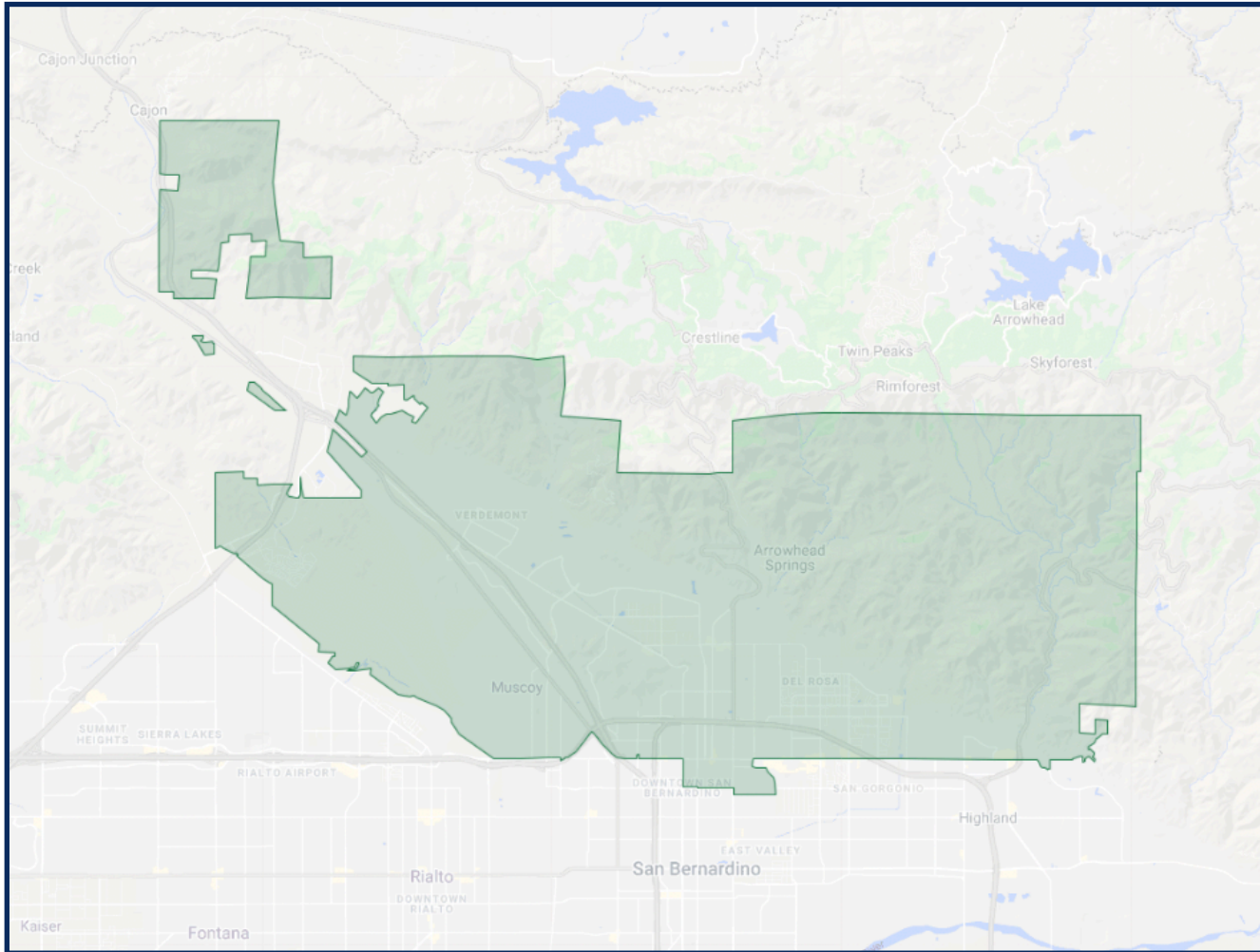
	2020 Count*	2019 CVAP*
Total	140,651	78,442
White	9.98%	16.44%
Black	10.18%	15.18%
Asian	3.15%	3.39%
Hispanic	73.91%	63.54%

DIVISION 2



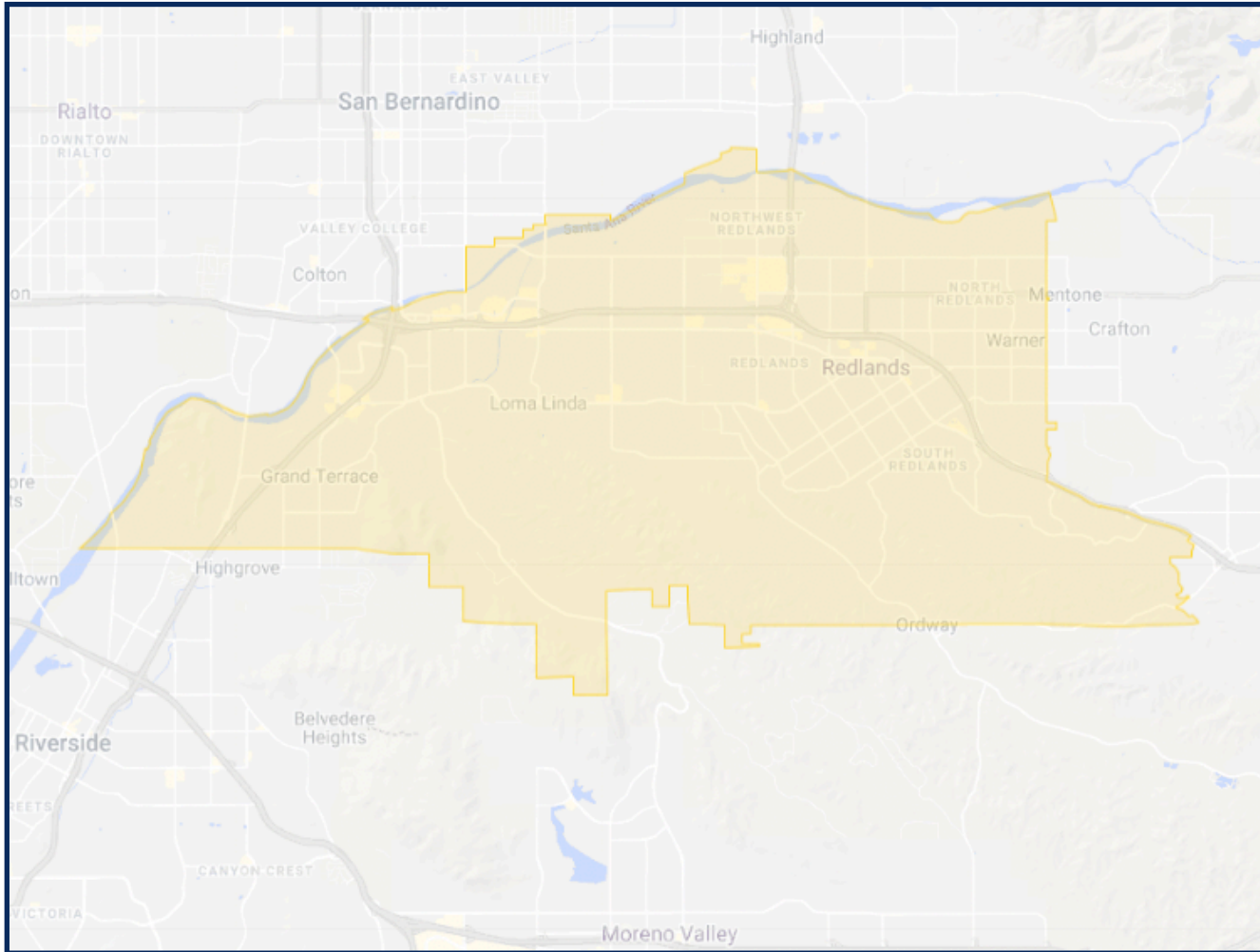
	2020 Count*	2019 CVAP*
Total	142,548	76,939
White	6.37%	14.10%
Black	8.01%	13.16%
Asian	3.14%	3.68%
Hispanic	80.24%	67.21%

## DIVISION 3



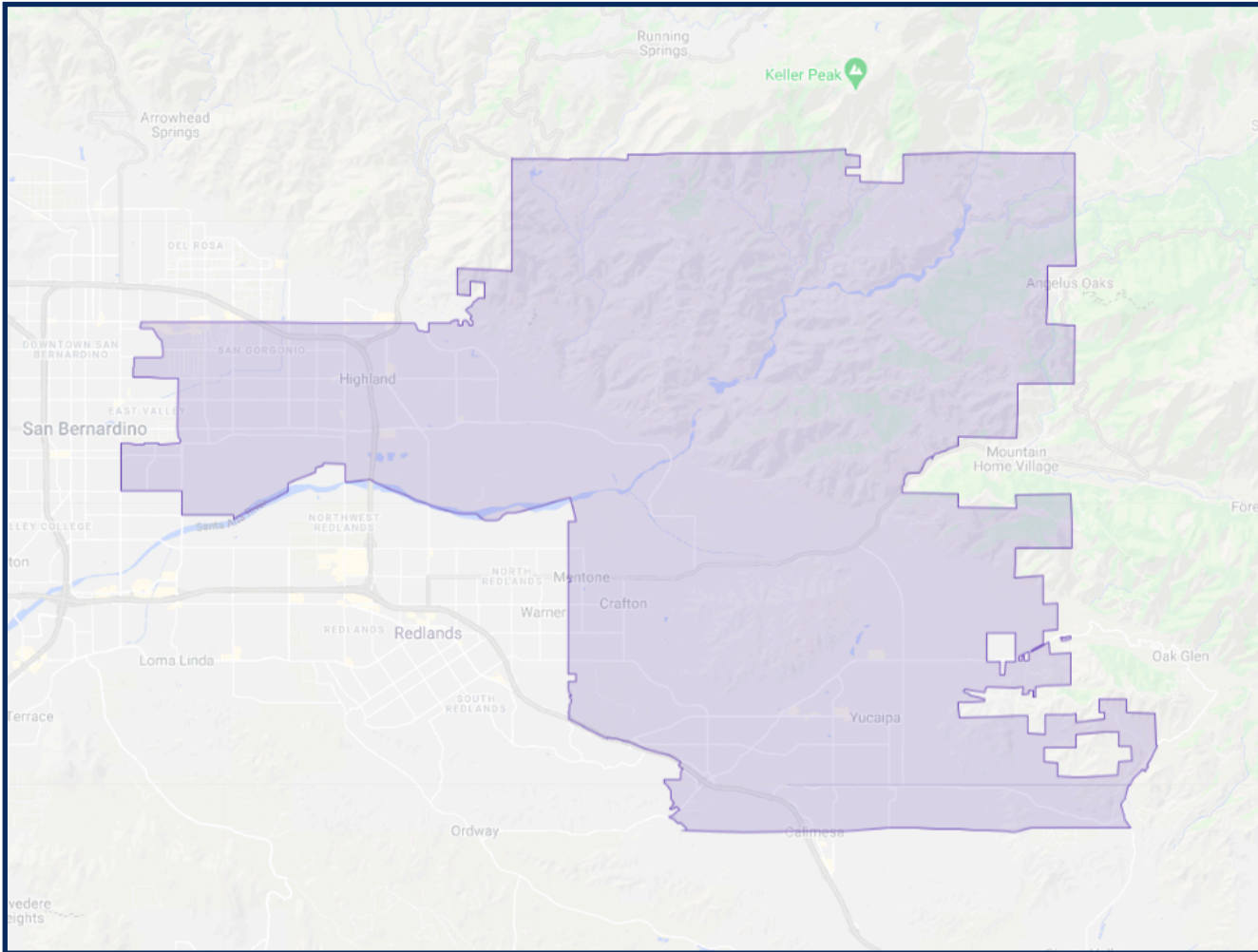
	2020 Count*	2019 CVAP*
Total	145,106	90,112
White	18.29%	25.69%
Black	11.97%	15.73%
Asian	3.50%	2.89%
Hispanic	62.29%	51.73%

## DIVISION 4



	2020 Count*	2019 CVAP*
Total	140,294	96,905
White	35.84%	46.84%
Black	7.16%	7.02%
Asian	13.33%	10.93%
Hispanic	38.11%	32.23%

## DIVISION 5



	2020 Count*	2019 CVAP*
Total	145,070	91,624
White	35.50%	46.92%
Black	6.76%	7.39%
Asian	5.17%	4.47%
Hispanic	47.90%	38.27%

# REDISTRICTING SBVMWD

## DRAFT 2

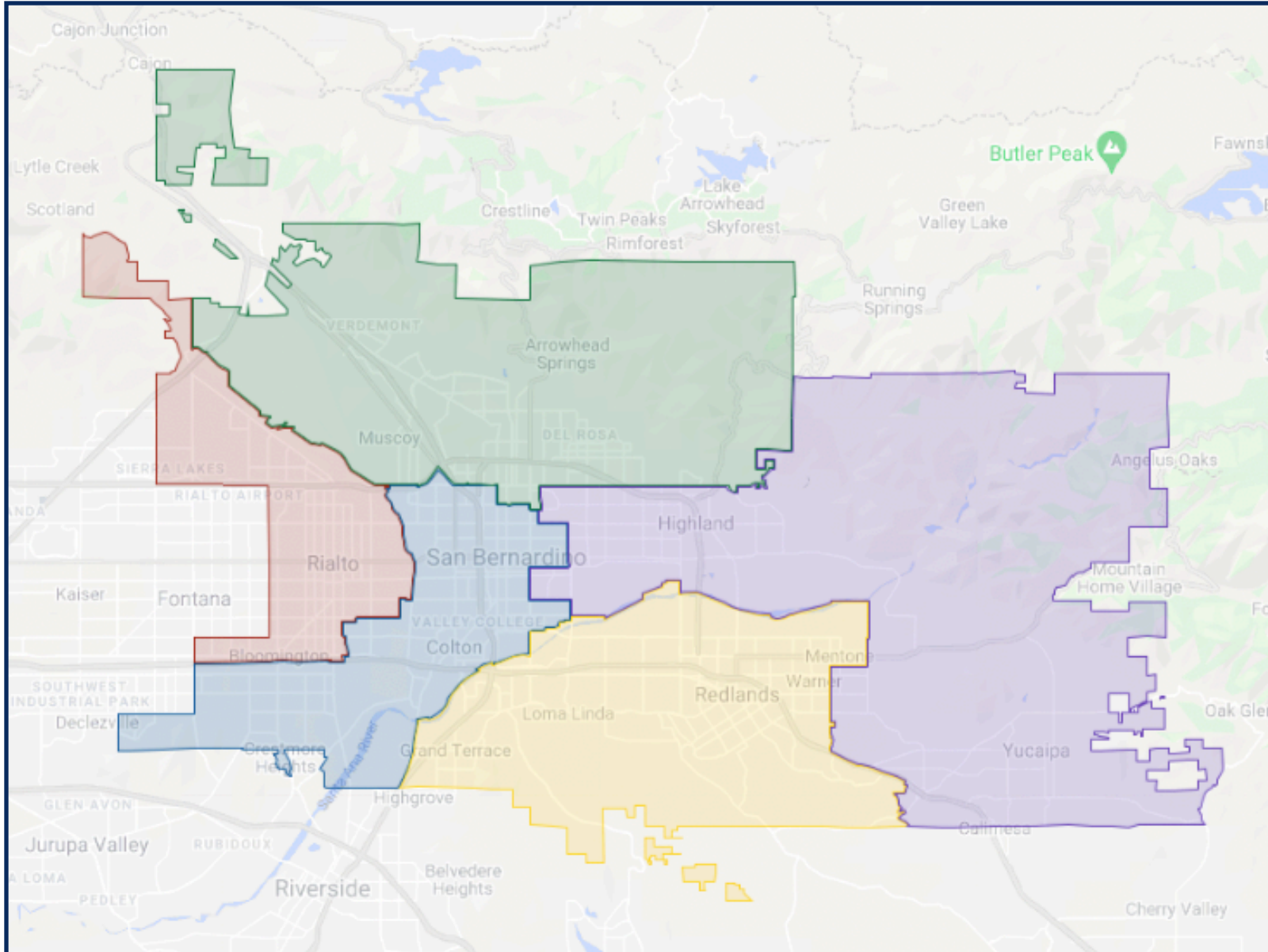
	DIVISION 1	DIVISION 2	DIVISION 3	DIVISION 4	DIVISION 5
2020 Census Count*	142,811	143,148	144,264	141,754	141,692
Deviation #	77	414	1,530	-980	-1,042
Deviation %	0.05%	0.29%	1.07%	-0.69%	-0.73%
2010 Census Count	133,302	139,345	125,024	131,876	133,251
2019 CVAP*	79,807	77,255	89,216	98,277	89,467
2010 CVAP	68,449	63,245	74,153	87,021	79,203



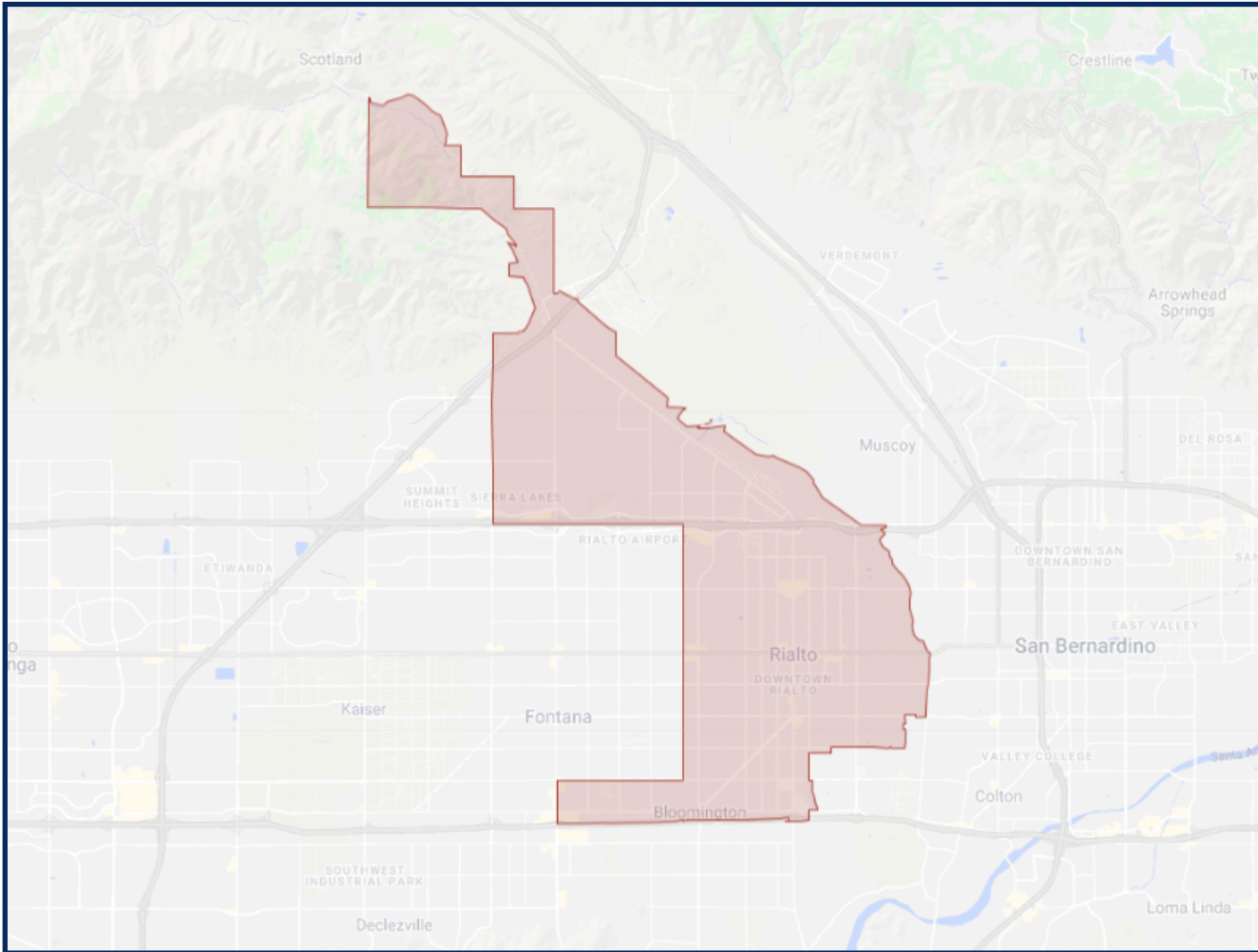
\*Adjusted for prisoner reallocation



# REDISTRICTING SBVMWD DRAFT 2

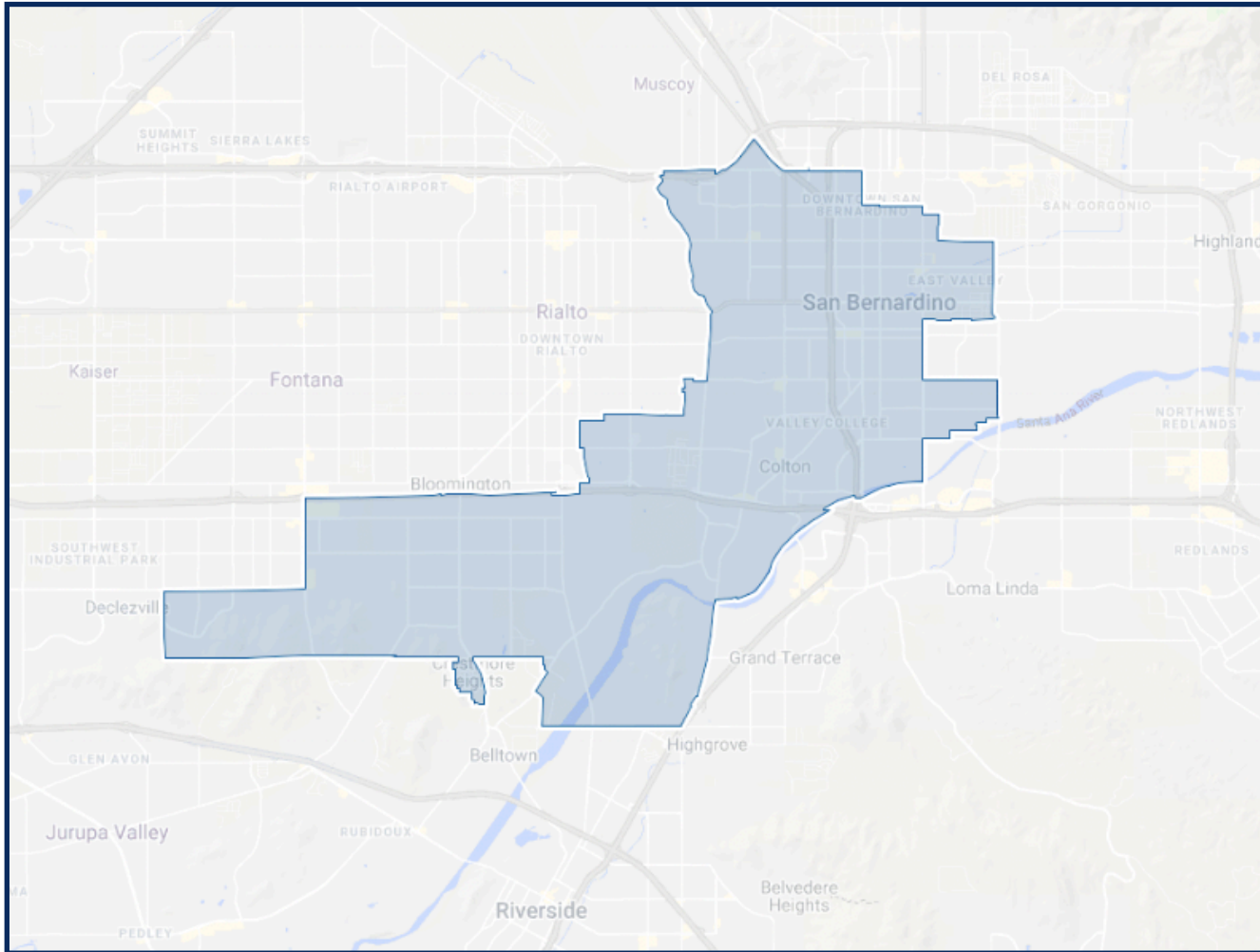


## DIVISION 1



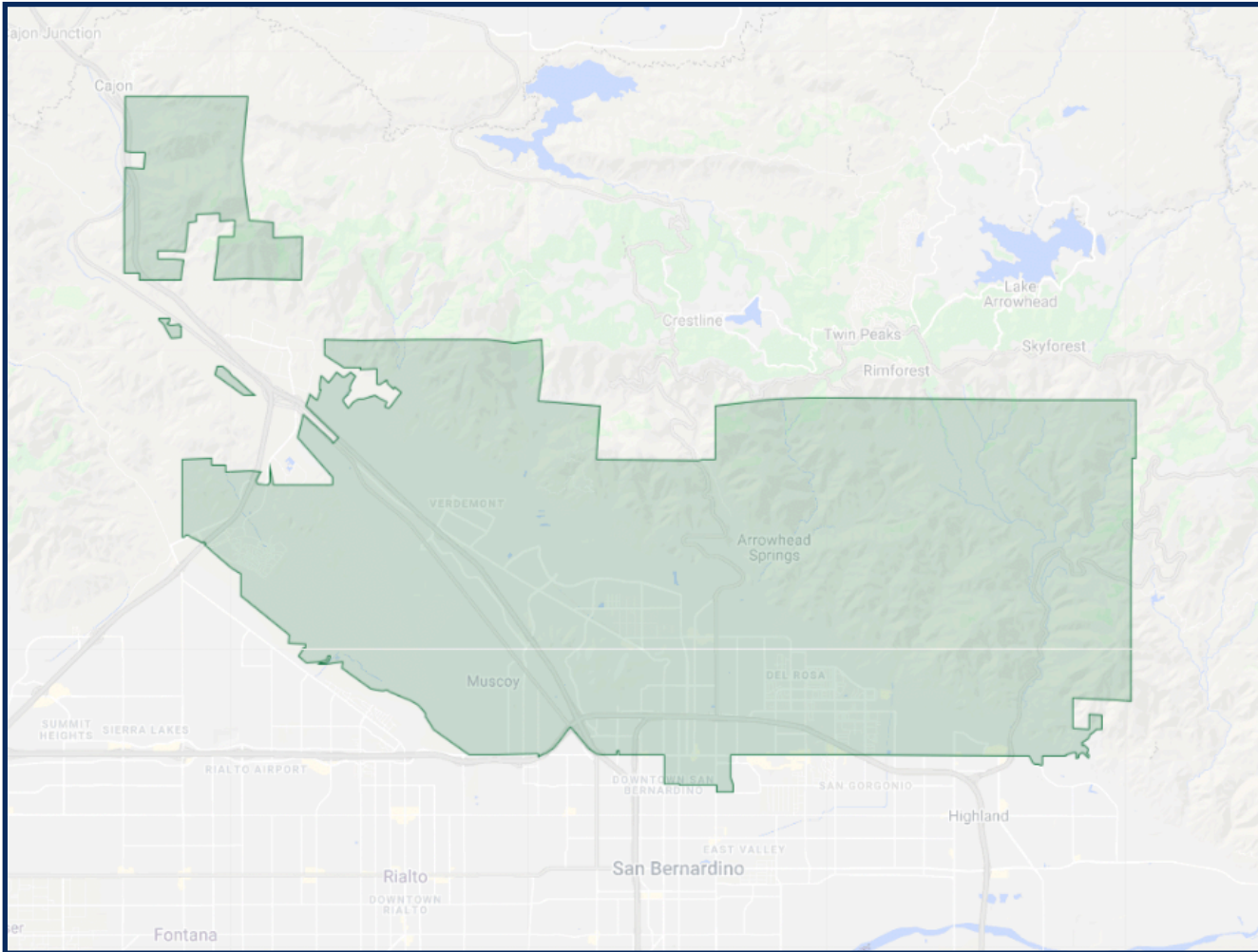
	2020 Count*	2019 CVAP*
Total	142,811	79,807
White	9.93%	16.30%
Black	10.09%	15.02%
Asian	3.15%	3.37%
Hispanic	74.05%	63.84%

## DIVISION 2



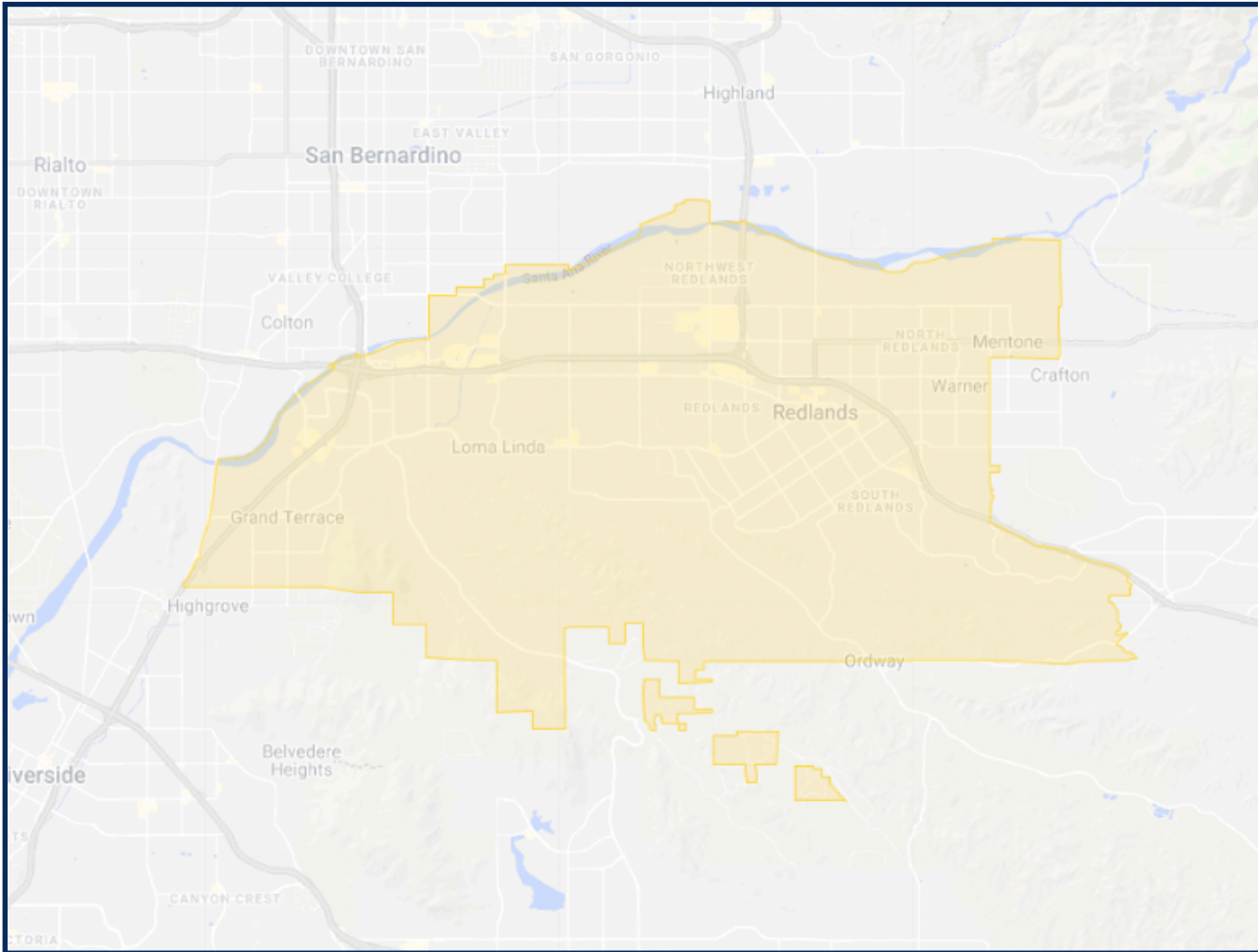
	2020 Count*	2019 CVAP*
Total	143,148	77,255
White	6.56%	14.63%
Black	7.98%	13.06%
Asian	3.13%	3.66%
Hispanic	80.08%	66.82%

## DIVISION 3



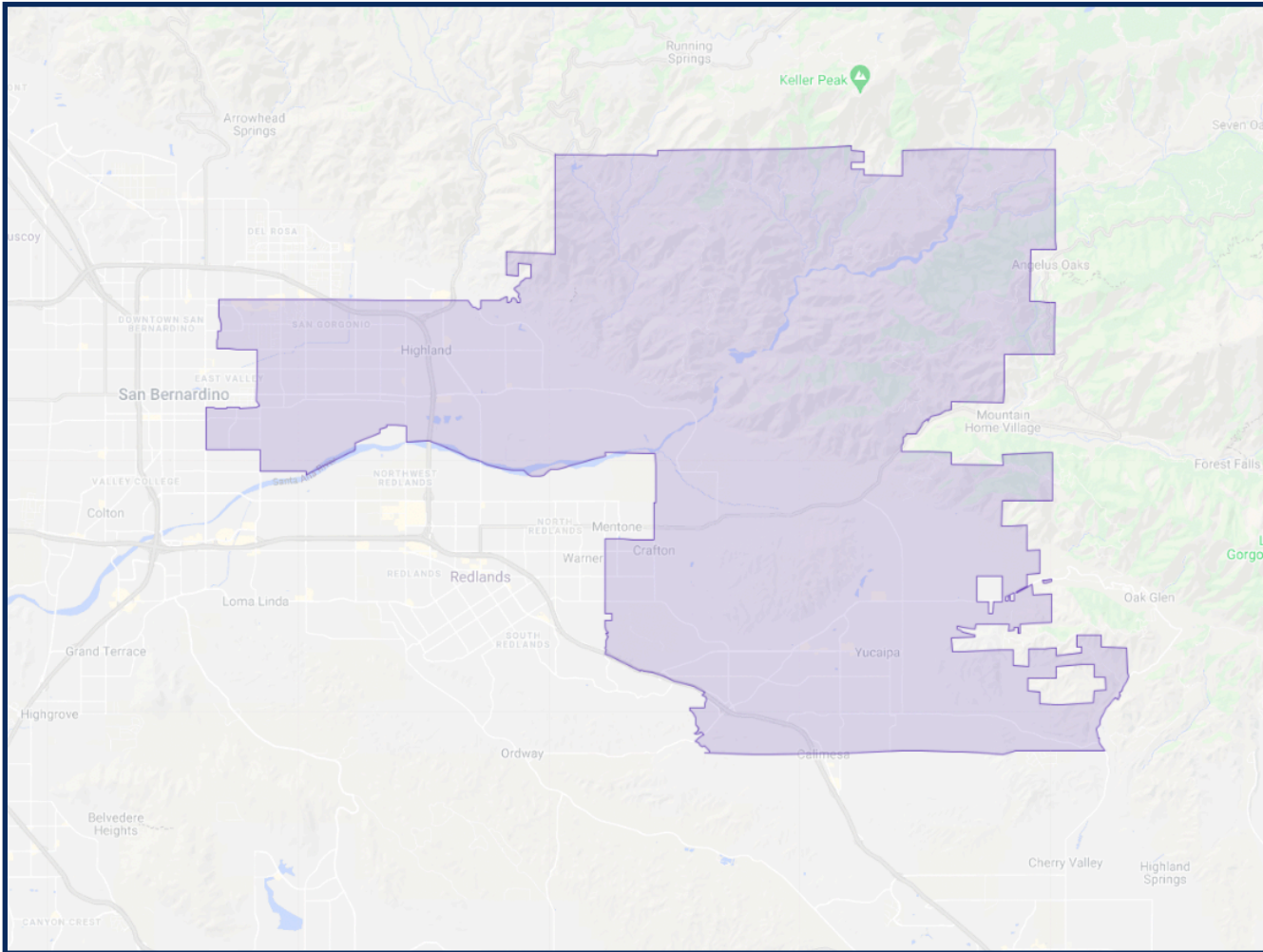
	2020 Count*	2019 CVAP*
Total	144,264	89,216
White	18.31%	25.72%
Black	12.00%	15.65%
Asian	3.51%	2.90%
Hispanic	62.22%	51.73%

## DIVISION 4



	2020 Count*	2019 CVAP*
Total	141,754	98,277
White	36.30%	47.00%
Black	7.16%	7.03%
Asian	13.25%	10.78%
Hispanic	37.68%	32.18%

## DIVISION 5



	2020 Count*	2019 CVAP*
Total	141,692	89,467
White	35.28%	46.76%
Black	6.82%	7.63%
Asian	5.19%	4.54%
Hispanic	48.08%	38.13%

# REDISTRICTING SBVMWD

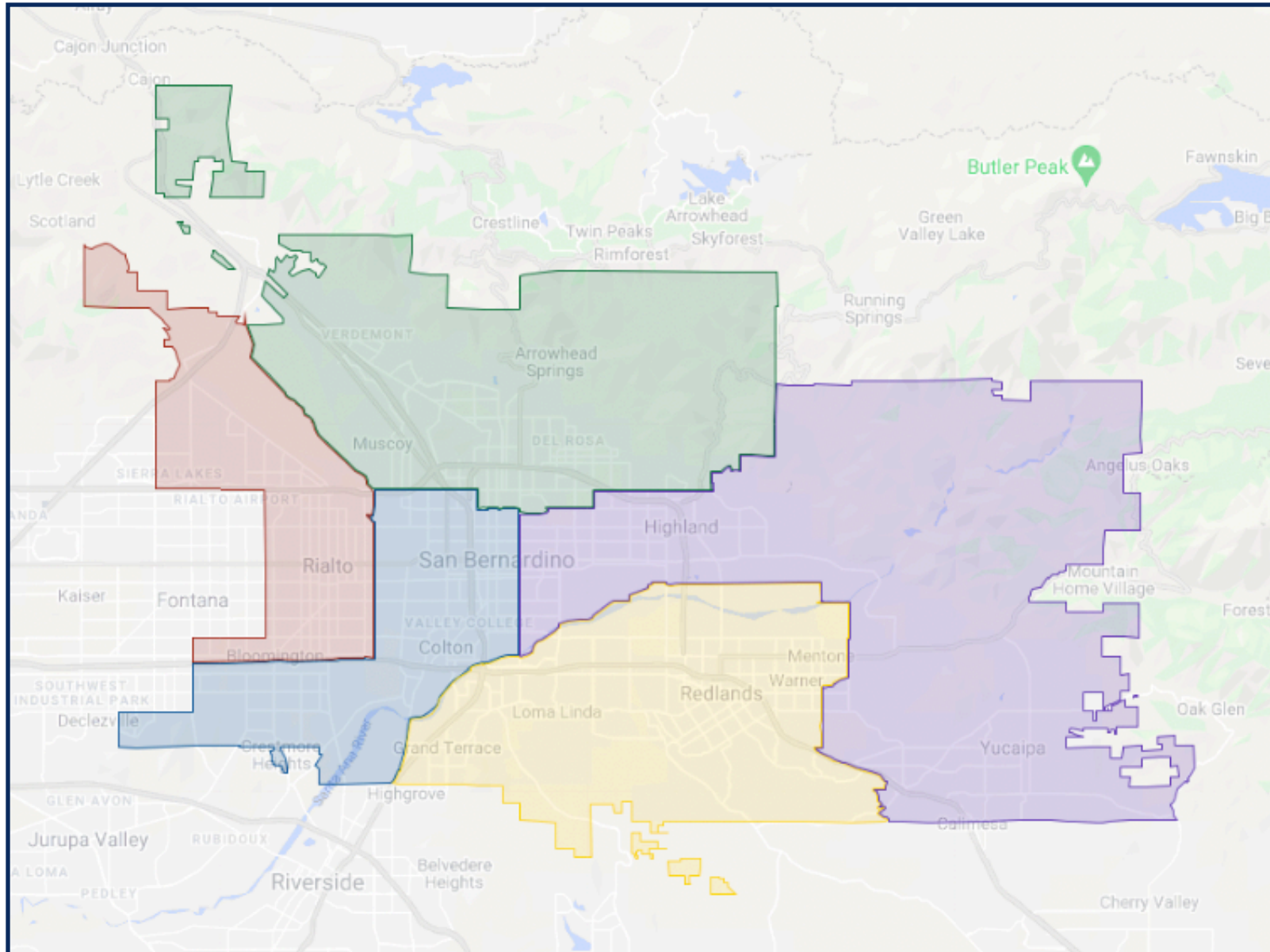
## DRAFT 3

	DIVISION 1	DIVISION 2	DIVISION 3	DIVISION 4	DIVISION 5
2020 Census Count*	142,831	142,289	141,908	143,700	142,941
Deviation #	97	-445	-826	966	207
Deviation %	0.07%	-0.31%	-0.58%	0.68%	0.15%
2010 Census Count	126,228	138,253	129,393	133,681	135,243
2019 CVAP*	82,008	75,870	87,700	99,564	88,880
2010 CVAP	65,157	63,461	76,510	88,656	78,287



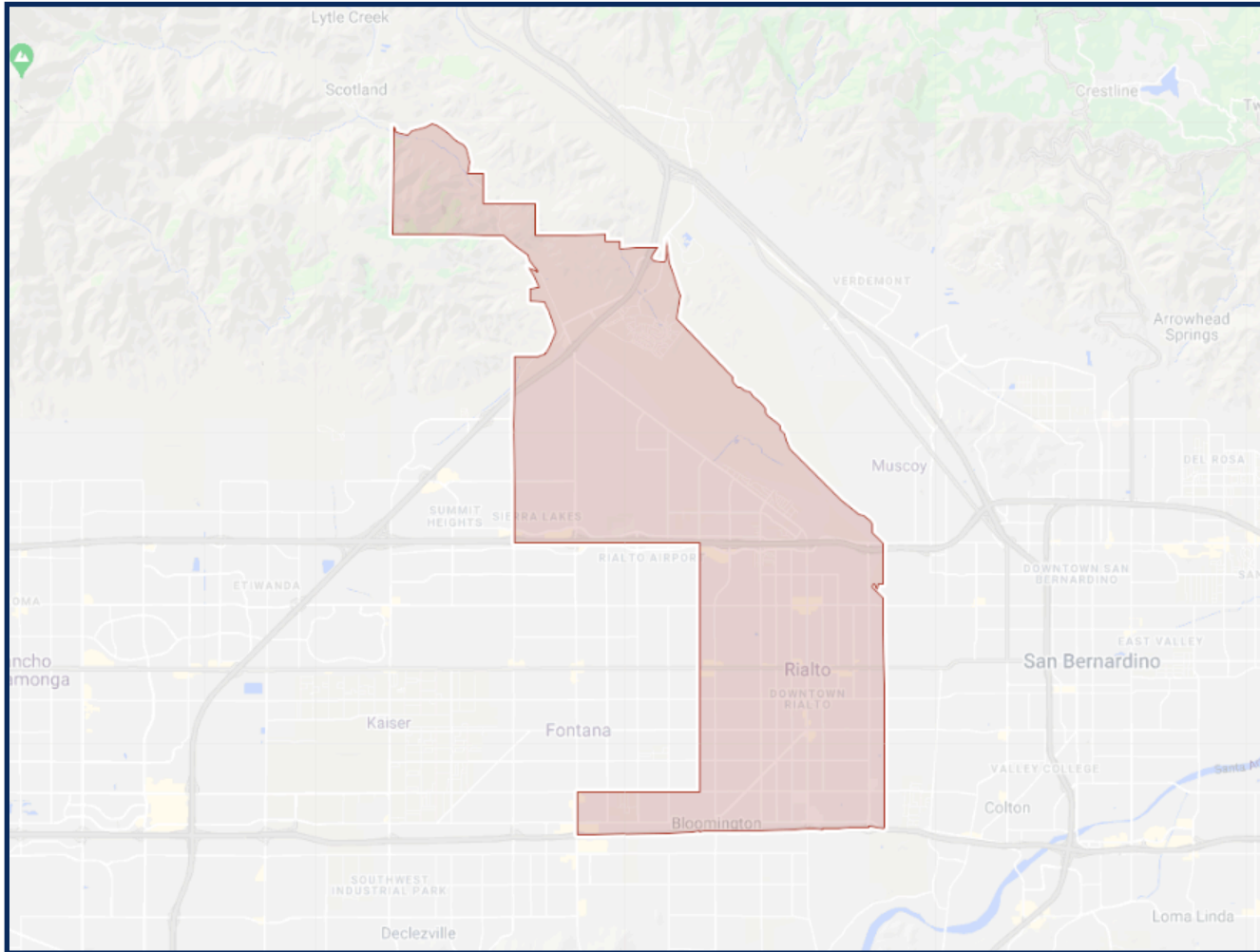
\*Adjusted for prisoner reallocation

# REDISTRICTING SBVMWD DRAFT 3



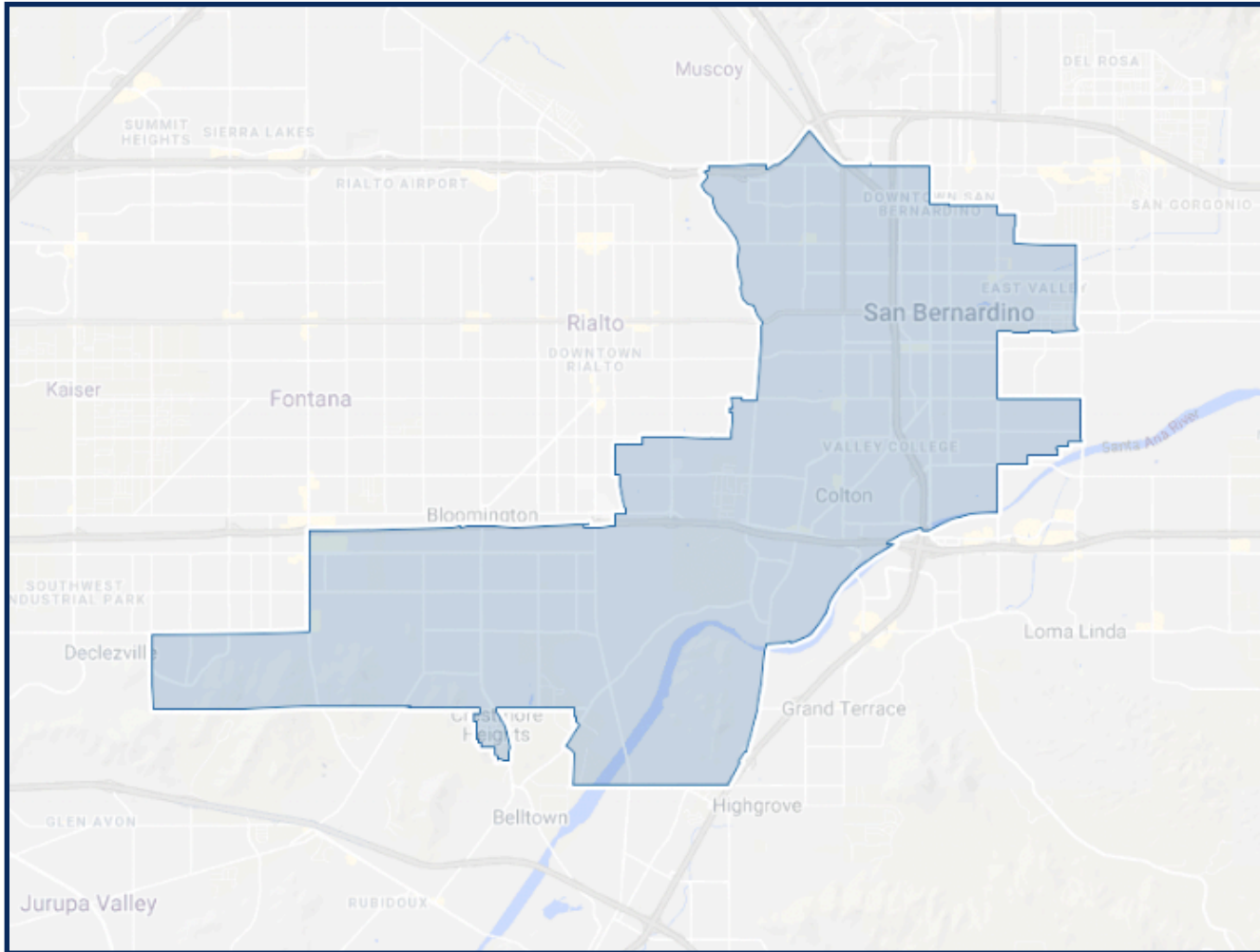


## DIVISION 1



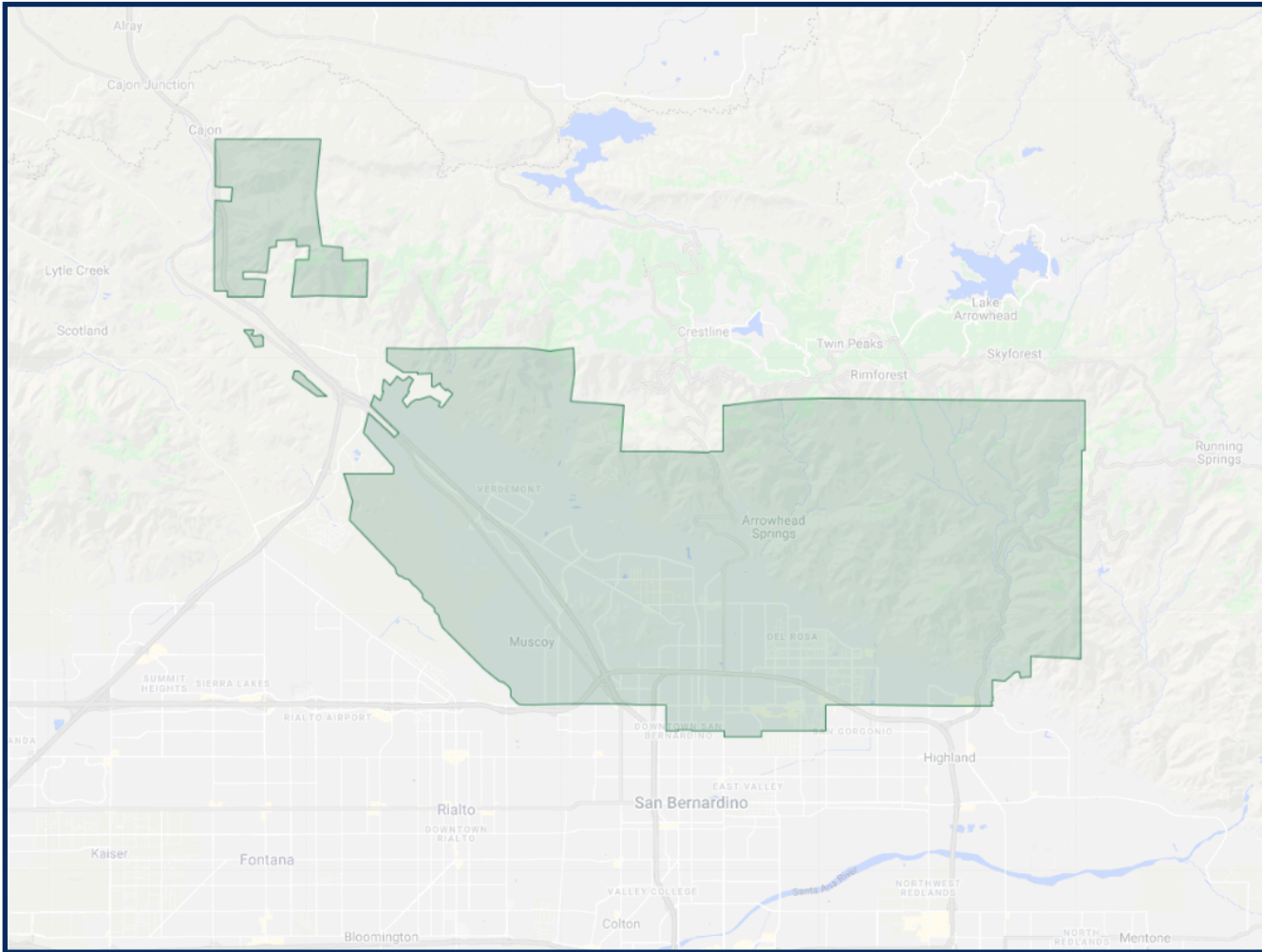
	2020 Count*	2019 CVAP*
Total	142,831	82,008
White	10.91%	17.51%
Black	10.51%	14.95%
Asian	3.86%	3.76%
Hispanic	71.82%	61.90%

## DIVISION 2



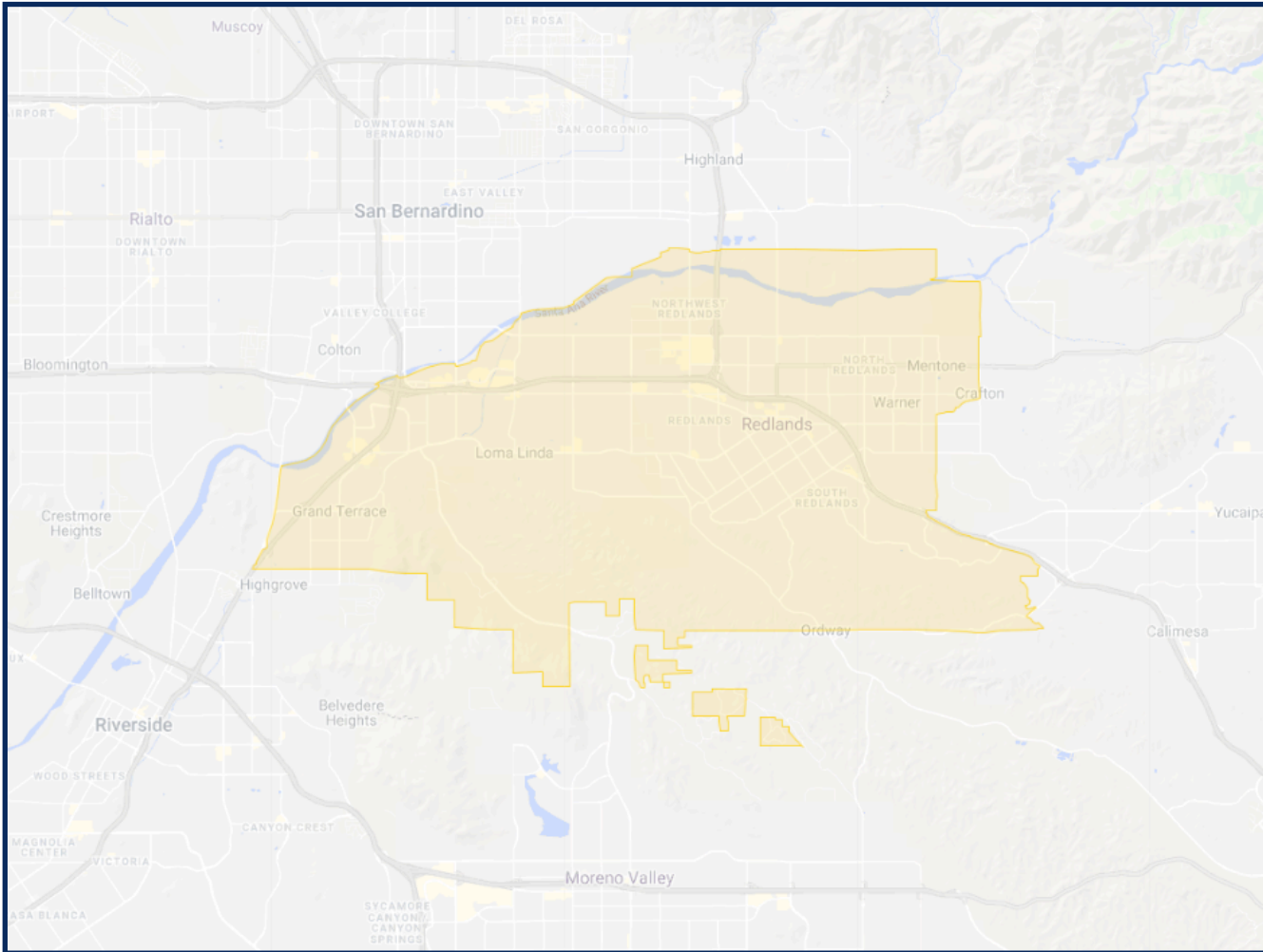
	2020 Count*	2019 CVAP*
Total	142,289	75,870
White	6.49%	14.07%
Black	7.78%	13.01%
Asian	2.83%	3.33%
Hispanic	80.65%	67.94%

## DIVISION 3



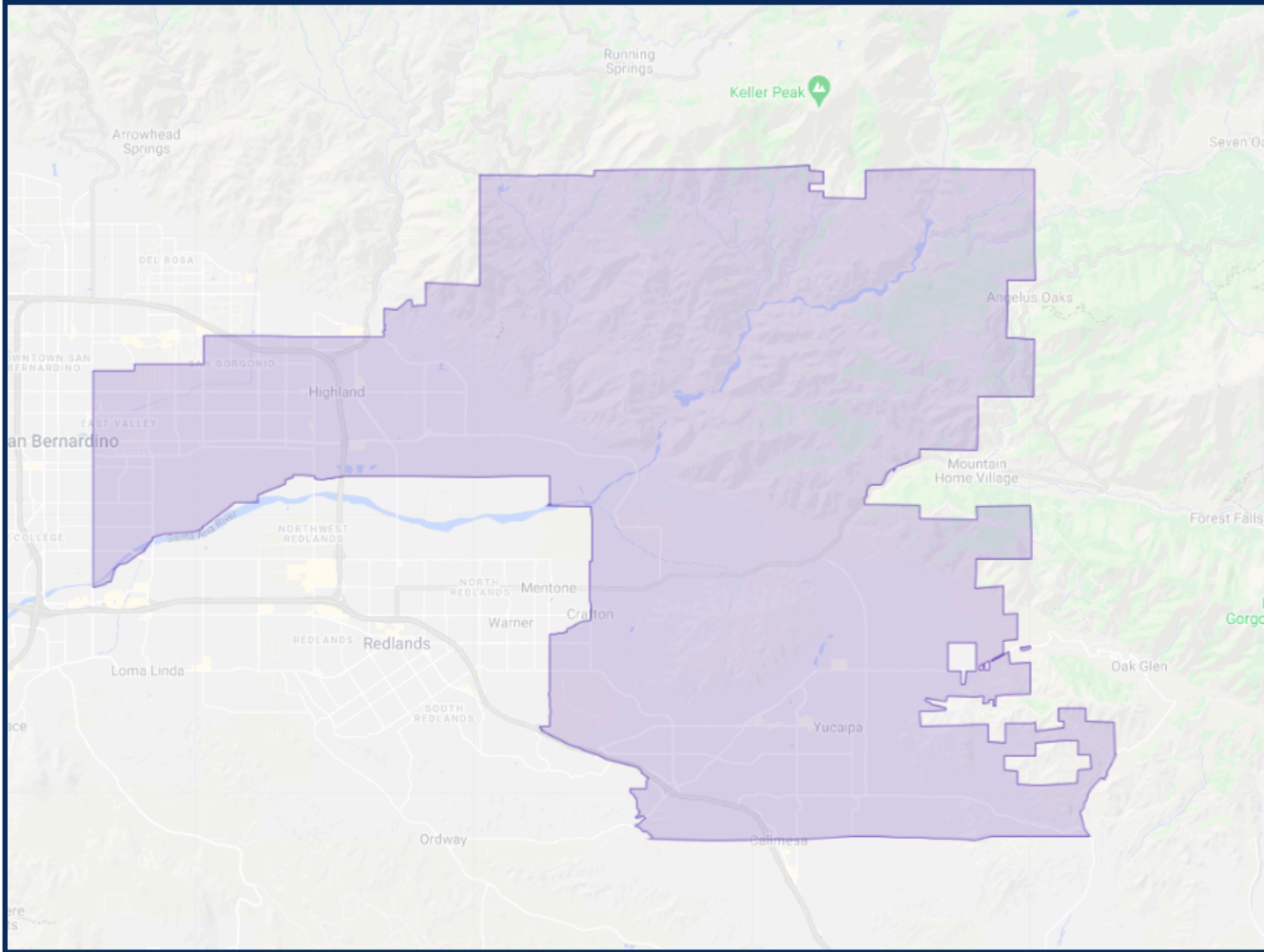
	2020 Count*	2019 CVAP*
Total	141,908	87,700
White	17.60%	25.37%
Black	11.87%	15.59%
Asian	3.09%	2.83%
Hispanic	63.55%	52.37%

## DIVISION 4



	2020 Count*	2019 CVAP*
Total	143,700	99,564
White	36.44%	47.15%
Black	7.14%	7.02%
Asian	13.18%	10.76%
Hispanic	37.60%	32.04%

## DIVISION 5



	2020 Count*	2019 CVAP*
Total	142,941	88,880
White	34.48%	46.18%
Black	6.82%	7.86%
Asian	5.11%	4.46%
Hispanic	49.08%	38.62%



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**DATE:** February 8, 2022  
**TO:** Board of Directors – Engineering  
**FROM:** Staff  
**SUBJECT:** Summary of January 11, 2022 Board of Directors Workshop – Engineering

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The Engineering Workshop convened on January 11, 2022, via Zoom video-teleconference. Director Harrison chaired the meeting.

Directors Present: President Kielhold, Vice President Hayes, Director Botello, Director Harrison, and Director Longville.

**Staff Present:**

Heather Dyer, MS, MBA – Chief Executive Officer/General Manager  
Wen Huang, PE, MS – Deputy General Manager/Chief Engineer  
Jose Macedo, ML, CPT-P (USA Retired) – Chief of Staff/Clerk of the Board  
Cindy Saks, CPA – Deputy General Manager/Chief Financial Officer  
Bob Tincher, PE, MS – Deputy General Manager/Chief Water Resources Officer  
Melissa Zoba, MBA, MPA – Chief Financial Officer

Dan Borrell – Manager of Geospatial Services  
Anthony Flordelis – Business Systems Analyst  
Matthew E. Howard, MS – Water Resources Senior Planner  
Adekunle Ojo, MPA – Water Resources Manager

**Members of the Public Present:**

Melody McDonald, San Bernardino Valley Water Conservation District  
David Raley, San Bernardino Valley Water Conservation District  
Nyles O’Harra, Yucaipa Valley Water District  
Joyce McIntire, Yucaipa Valley Water District  
Ron Coats, East Valley Water District  
Fabian Valdez Jr., Redistricting Insights  
Eddy Harrity, Redistricting Insights  
Matt Rexroad, Redistricting Insights  
Steve Stuart, Dudek

## **1. Introductions**

None.

## **2. Public Comment**

Chair Harrison invited public comment. There was none.

### **3.1 Public Hearing on the Redistricting of Valley District's Division Boundaries**

Chair Harrison introduced the public hearing pursuant to the requirements of the State of California.

Chief Executive Officer/General Manager Heather Dyer reported the hearing was properly noticed. Chair Harrison noted the agenda and notice was posted January 7, 2022 in accordance with the Brown Act.

Chief Information Officer Melissa Zoba provided an overview of California Elections Code 22000 which requires each special district to adjust its division boundaries after each decennial Census. She reminded the Board of the approved contract with Redistricting Insights (RI) to conduct the redistricting. This is the first of three required public hearings, she stated.

Mr. Matt Rexroad, Chief Legal Counsel of RI introduced RI staff Fabian Valdez and Eddy Harrity and explained the principles and process of redistricting. Members of the public may submit maps for consideration and RI staff will provide an analysis to include those in the process, Rexroad assured. He reviewed considerations in choosing boundaries and shared current division populations.

Director Longville asked about the notice of public hearing and the upcoming process. Chief Information Officer Melissa Zoba indicated the notice was circulated with the meeting agenda. The next hearings will be published in the newspapers, she stated.

Director Longville pointed out all Directors have ideas about the communities of interest and other considerations and asked when the Board would have opportunity to present these and have them included in the draft maps. Mr. Rexroad emphasized that maps are available to avoid any surprises and the Board will have plenty of time to provide input. Often, after this presentation, RI staff is asked to provide draft maps and provide suggestions at the next meeting for Board member input.

Director Harrison asked about the impact of the Citizens Voting Age Population (CVAP) data and Mr. Rexroad explained the Gingles court case factors and application to the area. He noted that this process does not include a racially polarized voting analysis.

The public hearing was opened at 2:37 p.m. There were no speakers. The public hearing was closed at 2:38 p.m.

Mr. Rexroad indicated he will return with draft maps and invited comment from the Directors.

Director Harrison noted his district will need to expand and requested it remain on the south side of the Santa Ana River and expand to the east.

Director Longville recognized that Division 3 has the greatest deviation and will lose some territory. She pointed to communities of interest and opined that the portion below Highland Avenue belongs in another division; at the west end it makes sense to cede some area to Division 2, and below Highland makes sense to go to Division 1. She emphasized that Highway 215 is a significant dividing line and communities on the west side make sense in Division 3, with the communities on the east side moving to another division. She also requested attention to the location of current director residences for presentation of maps that do not propose a burden in case of running for re-election.

Vice President Hayes pointed out that previous figures showed her division was the closest to the number it should be. To get the numbers right, the overall picture appears that Division 4 has no choice but to move east to avoid impacting Division 2, and Division 4 will impact Division 5, which will impact Division 3, Hayes posited.

Mr. Rexroad assured that choices would be presented. He noted that population can be clustered in some areas while other areas do not have many people, resulting in land mapping differences without much population difference.

President Kielhold pointed out there are two existing divisions on both sides of the Santa Ana River and adding a third would not be a stretch.

Director Botello emphasized this should be an equitable, fair process transparent to the public..

Ms. Zoba advised that staff will work with RI to engage the community and seek input. There will be several options to review at the next meeting, she said.

#### **4. Summary of Previous Meeting**



The summary notes from the December 14, 2021 Board of Directors Workshop – Engineering were accepted with no comments.

### **5.1 Consider the Draft Groundwater Sustainability Plan for the Yucaipa Sustainable Groundwater Management Agency**

Water Resources Senior Planner Matt Howard introduced main Project Manager Steve Stewart from Dudek. Mr. Howard provided history of the project, pointing out multiple studies of the subbasin which have all contributed to and helped build the Yucaipa Groundwater Sustainability Plan (GSP) developed by the Yucaipa Sustainable Groundwater Management Agency (SGMA).

Mr. Howard gave some detail on the Sustainable Groundwater Management Act and advised that the Yucaipa Basin was designated as high priority and was required to form a GSP to address sustainable yield and sustainability factors. Also in the Valley District area, the San Bernardino Basin, Rialto-Colton Basin, and the Riverside-Arlington Basin are adjudicated and managed to the Western-San Bernardino Watermaster adjudication of 1969 and are not subject to the development of a GSP, he added.

Mr. Howard explained sustainability indicators as applicable to the Yucaipa Basin, and the purpose of monitoring and managing the use of groundwater to avoid undesirable results. He introduced the hydrogeological concept models created by the U.S. Geological Survey which are the backbone of all water budget analyses performed and shared a map of the four SGMA Yucaipa subbasin management areas.

Mr. Howard presented charts for each management area and explained related indicators, water budget scenarios, management actions, and triggers. If the change in storage for the management area is above the measurable objective, then the water purveyors can pump at the sustainable yield without causing any undesirable effects, he explained. If the change in storage in the management area drops below the objective, the first management action would be triggered and net groundwater production would be reduced, he continued. This can be offset by purchasing imported State Project Water for recharge or direct delivery or implementing conservation programs.

If the volume in storage continues to decline past the minimum threshold, net production would be reduced by 35 percent of the sustainable yield and actions like the purchase of imported water would be necessary to avoid undesirable results, which could include impacts of chronic lowering of water levels, reduction in groundwater storage, and potential

land subsidence, Mr. Howard explained. He described the management actions including constraining pumping, defining the pumping allocations per retailer based on percentage of historical pumping, and importing water. He pointed to the charts indicating the direct result of YVWD's management action in the basin.

Director Harrison requested a map of water retailers overlying the Yucaipa Basin.

Mr. Howard explained that the goal is to ensure the volume in storage remains in the sustainability zone and to import as much State Project Water as possible to keep the Basin sustainable. The implementation of the GSP and the three management actions become effective when the GSP is adopted by the Yucaipa SGMA, he explained. The Yucaipa SGMA will be considering adoption of the GSP on January 26, 2022. The goal is to have all SGMA participating agencies provide their adopted resolutions prior to that meeting, to include with the GSP that will be submitted to the Department of Water Resources by the January 31 deadline and to show a collaborative effort and collective desire to continue managing and maintaining sustainability in the Yucaipa Basin, Howard advised.

Every five years until 2042, the Yucaipa SGMA will reevaluate the GSP and perform a recalculation of sustainable yield and assess responses if a management action were to be implemented, Howard noted. Annual reports are due April 1, he added.

**Action Item(s):** The Board voted to direct staff to forward this item to the January 18, 2022 Board of Directors meeting for consideration by the following roll-call vote:

There was no motion or second.		APPROVED: 5-0
AYES:	Botello, Harrison, Hayes, Kielhold, Longville	
NOES:	None	
ABSTAIN:	None	
ABSENT:	None	

## **5.2 Consider Contract Amendment with Dudek to Prepare the 2022 Annual Report for the Yucaipa Sustainable Groundwater Management Age**

Mr. Matt Howard indicated that this is the contract amendment required by SGMA to prepare the annual report and submit it by April 1. DWR requires actual data for water years from 2018 to 2021 and include groundwater production, quality of surface water supply, and description of processes for implementing the GSP including management actions, he said. The agreement was approved by the Yucaipa SGMA Board of Directors on October 27,

2021, and the \$27,320 cost will be subject to the funding split per the Yucaipa SGMA Memorandum of Agreement; Valley District's share will be \$1,708. This amount was included in this year's fiscal budget, Howard advised.

**Action Item(s):** The Board voted to direct staff forward this item to the next Board of Directors meeting by the following roll-call vote:

There was no motion or second.	APPROVED: 4-1
AYES:	Botello, Harrison, Hayes, Longville
NOES:	Kielhold
ABSTAIN:	None
ABSENT:	None

## 6. Future Business

There was none.

## 7. Adjournment.

The meeting was adjourned at 3:25 p.m.

## Staff Recommendation

Receive and File



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**DATE:** February 8, 2022

**TO:** Board of Directors' Workshop - Engineering

**FROM:** Heather Dyer, CEO/General Manager  
Wen Huang, Deputy General Manager/Chief Engineer

**SUBJECT:** Consider Valley District's Representative for the Western-San Bernardino and Santa Ana River Watermaster Committees, Respectively

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**Staff Recommendation:**

Direct Staff to work with House Counsel to draft resolutions nominating our CEO/General Manager, Heather Dyer, as the District's representative to the Western-San Bernardino Watermaster and the Santa Ana River Watermaster Committees, respectively, and forward the resolutions to the next Board of Directors' Meeting for consideration.

**Background:**

Valley District is a party to the two historic 1969 Judgments along the Santa Ana River that effectively ended decades of conflict. Both Judgments established a Watermaster Committee to administer and enforce the provisions in the stipulated settlements. Due to the District's position as the regional water agency for the San Bernardino Basin Area with rights to the State Water Project, the District was granted the right to a representative on each Watermaster Committee. The authority to nominate the District's representative to the Watermaster Committees is held by the Board of Directors.

The primary responsibility of the District's Watermaster Committee representative is to oversee the preparation of the annual reports to the Courts. These reports document the accounting provisions of the Judgments to ensure compliance by all the Parties. District Chief Engineer/Deputy General Manager, Wen Huang, has supported the Watermaster matters for the

last 9 years and has been representing the District on both Watermaster Committees since 2020. Given the anticipated upcoming capital improvements projects and because Watermaster matters are primarily supported by the Water Resources Department with supplemental support by the Engineering and Business Information Services Department, it would be more effective and efficient for the CEO/General Manager, Heather Dyer, to be appointed as the Watermaster to perform the duties of Watermaster Committee representative on behalf of the District. Our Chief Engineer, Wen Huang, will continue to support Watermaster matters at an advisory capacity.

**Fiscal Impact:**

No fiscal impact for the nominations.



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**DATE:** February 8, 2022

**TO:** Board of Directors' Workshop - Engineering

**FROM:** Mike Esquer, Senior Project Manager  
Wen Huang, Chief Engineer/Deputy General Manager

**SUBJECT:** Consider a Budgetary Amendment for the 2021 Water Supply Contingency Program to Meet the BVMWC In-Lieu Water Demand

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**Recommendation:**

Direct Staff to forward a budgetary amendment in the amount of \$322,750 for the 2021 Water Supply Contingency Program (Program) to meet the Bear Valley Mutual Water Company (BVMWC) In-Lieu water demands.

**Summary:**

On May 18, 2021, the Board of Directors approved the 2021 Program and authorized a budgetary amount of \$600,000 for developing alternative groundwater sources to meet District's In-Lieu water demands with BVMWC under the 1996 Big Bear Agreement due to a low State Water Project (SWP) allocation and availability year.

In anticipation of another possible low SWP allocation for 2022, BVMWC and its shareholders were able to produce additional groundwater supply to help Valley District meet its In-Lieu water supply for 2021, which allows Valley District to carry over additional SWP into 2022. The final total cost for the 2021 Program is \$932,750, which includes \$657,750 for well production, operations and maintenance costs, \$200,000 for well rehabilitation costs and an estimated amount of \$75,000 for Groundwater Council assessments or Well Production Assessments.

**Background:**

The historically dry conditions in California coupled with environmental restrictions in the Sacramento-San Joaquin Delta led the Department of Water Resources to set the State Water Project (SWP) allocation at 5% (5,130 acre-feet) for WY 2021. In response to this condition, in early 2021, Staff met with BVMWC to identify alternatives to meet the Valley District's in-lieu obligations for BVMWC and conserve the use of SWP water. Among other things, the strategy is to develop replacement local water supplies to make up for the lack of imported water for the in-lieu obligations. This is the same strategy that was effectively and successfully implemented during the previous drought conditions in 2014 and 2015. Per the Big Bear Agreement, BVMWC may request up to 65,000 acre-feet of in-lieu water to be delivered by the District in any ten-year period. In 2021, BVMWC requested up to a total amount of 8,500 acre-feet of in-lieu water, out of 12,000 acre-feet that could have been requested.

On May 18, 2021 the Board of Directors authorized a budgetary authority of \$600,000 for the 2021 Program to meet the expected peak demand summer season. This budget was established to reimburse BVMWC and its shareholders up to 4,000 acre feet produced from local water sources and to refurbish unused or underused wells to help Valley District meet the 2021 and future in-lieu demands. The Program budget is funded through the \$1,600,000 already paid to Valley District for the 2020-2021 fiscal year in accordance with the 1996 Big Bear Agreement. This payment is intended to cover Valley District's costs to provide in-lieu water to BVMWC in exchange for water being retained in Big Bear Lake.

In anticipation of another possible low SWP allocation for 2022, BVMWC and its shareholders were able to produce additional groundwater supply to help Valley District meet its In-Lieu water supply for 2021, which allows Valley District to carry over additional SWP into 2022. Overall, in 2021, BVMWC received a total of 8,274 acre-feet of in-lieu water, of which 5,261 acre-feet was provided from local sources by re-equipping unused or underused private and municipality owned wells to meet 64% of the 8,274 acre-feet of in-lieu water requested by BVMWC. Through this Program, Valley District was able to carry over 5,261 acre-feet of SWP water into 2022 for uses.

**SUMMARY OF 2021 IN-LIEU WATER DELIVERIES**

	<b>SWP WATER</b>	<b>SBVMWD Well</b>	<b>BVMWC Wells</b>	<b>EVWD Wells</b>	<b>City of Redlands Wells</b>	<b>TOTAL IN-LIEU BY MONTH</b>
<b>June</b>	320.50	0.00	349.04	248.90	383.80	1,302.2
<b>July</b>	428.90	120.20	243.74	355.50	656.60	1,804.9

<b>August</b>	435.10	220.70	157.22	52.00	667.30	1,532.3
<b>September</b>	329.80	204.40	0.00	0.00	669.10	1,203.3
<b>October</b>	446.60	277.60	0.00	0.00	471.70	1,195.9
<b>November</b>	201.70	0.00	0.00	0.00	487.60	689.3
<b>December</b>	27.80	0.00	0.00	0.00	518.60	546.4
<b>TOTALS</b>	2,190.40	822.90	750.00	656.40	3,854.70	<b>8,274.4</b>
<b>Total In-Lieu Produced by Partners</b>			<b>5,261.10</b>			

Values in table are in acre-feet units

Of the \$600,000 approved budgetary authority, Staff originally estimated a cost of \$100,000 for rehabilitation of a 10 cfs capacity BVMWC well and \$500,000 (\$125.80/acre-feet) to cover the electrical and operations & maintenance costs per acre foot of water production. Due to several major unknown conditions at the well site the final costs amounted to more than \$400,000. Our share of the well improvements is \$200,000. Secondly, in order to cover the additional 1,261 acre-feet of produced well water at \$125.80 per acre-foot cost, an additional budget \$162,000 is required. Since the production was pumped on Valley District's behalf, it is requested that the San Bernardino Basin Groundwater Council's Assessments or the Well Assessment fees assessed by the San Bernardino Valley Conservation District be covered by Valley District for water produced for our in-lieu purposes (5,261 acre feet). The assessments are unknown at this time, however, a budgetary authorization for these fees is estimated to be \$75,000. Valley District will only pay the actual assessment fees after they have been calculated for the 2021 production year. The total cost of providing the alternate water source for in-lieu water in 2021 is \$942,000. Based on the discussion with BVMWC, rather than Valley District paying them for the actual costs of the production for the in-lieu water, BVMWC, City of Redlands and EVWD would prefer to receive a like-amount credit in their prepaid account against their future orders of paid SWP water.

**Fiscal Impact:**

The total cost is \$942,000 for development of the alternative groundwater supply to meet the demand of in-lieu water to BVMWC is funded by the 2020-21 Fiscal Year payment from BBMWD of \$1.6M. Of the \$942,000, \$600,000 was authorized by the Board of Directors previously, therefore a budgetary amendment of \$342,000 is being requested.





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**DATE:** February 8, 2022

**TO:** Board of Directors Workshop - Engineering

**FROM:** Wen Huang, Chief Engineer/Deputy General Manager

**SUBJECT:** Consider Cost-Share with the City of Redlands for Well Rehabilitation and Improvements to the San Bernardino Avenue Well

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**Recommendation:**

Direct Staff to forward the cost-share arrangement with the City of Redlands for well rehabilitation and improvements to the San Bernardino Avenue Well in the amount of up to \$157,000 to the next Board of Directors Meeting for consideration.

**Summary:**

The City of Redlands is interested in partnering with Valley District to share the cost for the proposed well rehabilitation and improvements to the San Bernardino Avenue Well, which is owned by Valley District, in the amount of up to \$157,000 each. The proposed rehabilitation and improvement work is necessary to bring the well to the current standards as a municipal supply well and to optimize its operational efficiency and effectiveness.

**Background:**

As part of the 1996 Settlement with the Big Bear Municipal Water District, Valley District acquired a production well, San Bernardino Avenue Well, located on the north side of San Bernardino Avenue, between Wabash Avenue and Dearborn Avenue, in the City of Redlands. This well is connected to both Bear Valley Mutual Water Company and the City of Redlands distribution systems. Since Valley District doesn't provide water services directly to retail customers, this well has been leased by the City of Redlands to meet their customers' demands starting in 2005 and has also been used to meet District's in-lieu obligations from time to time when the State Water Project (SWP) allocation was low. Up until early 2021, when the well was leased by the City of

Redlands, the City paid the District for the electricity cost plus a nominal mark-up cost to cover District's administrative expenses. In 2021, the District and the City entered into an agreement for the City to pay "actual costs" for repairs and replacement associated with operations of the facility.

The City of Redlands is interested in continuing to include this well as part of their water supply portfolio and has been planning to rehab this well and make improvements to the well. Specifically, the well has gradually reduced its production rate since the well was acquired in 1996 and is due for well rehabilitation work. Once the well is rehabbed, the existing pumping equipment will be evaluated and optimized for production. Additionally, the well pedestal was not built to the current standards for municipal water supply purposes and will be rebuilt. As part of the reconstruction of the wellhead pedestal, the wellhead piping, which has deteriorated and shown signs of corrosion, will also be reconfigured and replaced.

The City staff has obtained multiple quotes and recommends that General Pump Company be selected for the proposed work. The estimate for the work is approximately \$285,524.59. In recognition of the City's uses of the well for its own benefits and the District's uses for this well as an in-lieu supply for District's benefits, Staff recommends that the Board of Directors consider partnering with the City to share the overall cost evenly. Additionally, due to current material and supply shortage and unknown downhole condition of the well, it is also recommended that a 10% contingency be authorized to cover unforeseen circumstances. This would bring the estimated total cost for each party to approximately \$157,000.

**Fiscal Impact:**

The estimated cost of \$285,524.59 plus a 10% contingency brings the total cost to approximately \$314,000, of which Valley District's share will be up to approximately \$157,000. Although this work was not specifically anticipated during the FY21-22 budget development, there is currently \$157,000 available in the approved General Fund Budget under Line Item 6470 Maintenance and Repairs.

**Attachment**

1. Cost Estimate for Well Rehabilitation and Improvements to the San Bernardino Avenue Well



159 N. ACACIA STREET \* SAN DIMAS, CA 91773  
 PHONE: (909) 599-9606 \* FAX: (909) 599-6238

CAMARILLO, CA 93010 \* PHONE: (805) 482-1215  
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*Serving Southern California and Central Coast*

January 31, 2022

*Via Email*

City of Redlands  
 35 Cajon Street  
 Redlands, California 92373  
 Attn: Paul Mariscal

**Subject: Muni Well (Expanded Scope) – Revision 1**

General Pump Company performed a job walk with City personnel to review the site layout and discuss an expanded scope of work outside of the line items found on task 3.4.

The main items under the expanded scope focused mainly on replacing and resizing the main transition discharge piping from the discharge head flange to the existing 14” butterfly valve. The new piping will be 12” steel, without coatings, 150# SOW flanges, with nut bolt, and gasket kits. Additional materials and labor to incorporate the additional pipe liner that runs to the west of the well that will be raised due to the current height of the well pedestal. The following is a takeoff of materials proposed, along with field labor.

**Cost**

**Bid Schedule 3.4**

<b>Item No.</b>	<b>Item Description</b>	<b>Total Units</b>	<b>Cost Per Unit</b>	<b>Total Cost</b>
1	Mobilize: All equipment and crews needed to complete proposed work. (Maximum 5% of total bid).	LS		\$9,000.00
2	Remove Pumping Equipment: Remove 505' of Oil-lube turbine pump equipment consisting of 12" x 4" x 2-7/16" column tube and shaft,	LS		20,800.00
3	Tear Down and Inspect: Tear down and inspect pumping equipment for damages. Provide a detailed report of damages and recommendations for repair.	LS		1,500.00
4	Video Log Well: Video log well after pumping equipment has been removed. Provide detailed report, recommendations for rehabilitation and 2 DVD copies to the City.	LS		1,100.00
5	Demo and Install New Pump Base: Existing concrete pump base is 78 "x 78" x 6". New pump base shall utilize AWWA Standard A100-06 and extend no less than	LS		14,000.00



	24 " above final ground level elevation.			
6	Raise Discharge Piping: Raise 12" discharge piping 10" to meet new pump head height. Provide a Victaulic fitting for flex at pump discharge.	LS		1,500.00
7	Wire Brush and Bail: Brush and bail well to bottom of 18" casing x 590'. Brush type will be decided based on well conditions and recommendations. All removed bailing materials must be disposed of offsite. Note: Estimate 40 hours of down hole work. City will consult with the contractor to determine and finalize hours based on well condition	40	350	14,000.00
8	Video Log Well: Video log well post brush and bail. Provide 2 DVD copies to the City.	LS		1,100.00
9	*Rebuild Tube and Shaft Assembly: Rebuild 505' of 4" x 2-7/16" tube and shaft assembly with all new bearing, couplings and any other needed hardware. Rebuilt tube end sections shall consist of machining faces of all tube ends parallel and concentric.	505'	26	13,130.00
10	*Furnish and Install New Tubing and shaft assembly: Furnish and install entire tube and shaft assembly consisting of 505' of 4" x 2-7/16" steel tubing and shaft.	505'	38	19,190.00
11	*Furnish and install New Column Pipe: Furnish and Install 505" of 12" schedule 40 steel column pipe. Include all necessary couplings.	505'	100	50,500.00
12	Rebuild Stretch Brass Assembly: Rebuild stretch brass.	LS		800.00
13	<b>Rebuild Layne &amp; Bowler Head:</b> Sand blast and epoxy coat pump head. Rebuild Layne & Bowler pump head assembly with 416SS head shaft and all necessary hardware for installation of pumping equipment and motor. All rebuild materials shall meet NSF/ANSI 61 standards	LS		4,000.00
14	* <b>Heb11iJd Bowl Assembly:</b> Rebuild 6 stage Layne & Bowler 16KHM bowl assembly. Replace all necessary materials including brass bushings, wear rings and 416SS shafting.	LS		7,000.00



	All rebuild materials shall meet NSF/ANSI 61 standards			
15	<b>*Furnish And install New Bowl Assembly:</b> Supply new Gould's pump bowl assembly or City approved equal capable of meeting pumping conditions of 2650 PM @ 480' TOH, Pump bowl assembly shall meet NSF/ANSI 61 drinking water standard Write in - manufacture name, pump model number and number of stages.	LS		9,800.00
16	<b>Furnish and Install New Airline:</b> Furnish and install 505' of continuous 1/4" stainless steel airline with direct read gauge airline to be banded every 20' with stainless steel bands.	LS		1,700.00
17	<b>Install Oil lube Turbine Pumping Equipment:</b> Install 505' of oil lube turbine pumping equipment. Restore well site to pre-rehabilitation condition. Provide all necessary gaskets and needed hardware.	LS		21,000.00
18	<b>Perform Start Up Wire Motor, check rotation:</b> Perform start up, wire motor, test rotation.	LS		1,500.00
19	Pump Performance Testing: Perform pump performance testing and provide detailed report to city. Provide all associated install information, pump curve, NSF certification, installation sheet, drawings, work logs and test reports. Test reports to include AMP/voltage, Rossum sand test, Motor temp & vibration, flow & pressure, static, pumping and drawdown water levels.	LS		500.00
20	Provide as built drawing: Provide as built of pumping equipment	LS		100.00
21	Demobilize: All equipment and crews used to complete proposed work.	LS		200.00
			<i>Subtotal of Bid Schedule</i>	<i>\$192,420.00</i>



### *Additional Work*

#### Materials

- 400 HP USEM VHS Motor
- 12" flanged McCrometer FxF 4-20MA totalizer 100 cf
- Steel weld on flanges (6)
- 12" Stnd Blk A53B Pipe w/BxB end
- 12" 150# RF weld Neuc Flange
- 16" 150# RF s/o flange
- 16"x12" Stnd, CR
- 12" 150# Flanged swing check
- Pipe stands (2)
- Ultra-Sonic Level Transducer
- 2x4-6 THREDOLET (3)
- 1" Corp stop (2)
- 1" THREDOLET (6)
- 1 1/2" THREDOLET (2)
- 1x3 3M THREDOLET (5)
- 12" Smith Blair flex coupling
- 12 NB&K (5)
- Spool section for waste line
- Sample station
- 10" NB&6 set

*Total Materials, Includes Freight and Sales Tax*      \$76,778.59

#### Shop Labor

- Load equipment, piping valves
- Cutting supplies, welding materials

*Est. 8 Hrs. @ \$95/Hr.*      760.00

#### Field Labor

- Mobilize to site, conduct brief tailgate safety meeting
- Rig up crane, remove all shade structures  
And store safely on site
- Remove existing piping, valves, spools that will be replaced
- Unload new materials
- Demobilize

Rotary Crane and 1 Man Crew @ \$265/Hr.  
Service Truck, Pump Mechanic and Helper @ \$303/Hr.



Est. 10 Hrs. @ \$573/Hr. 5,730.00  
Est. OT 2 Hr. @ \$168/Hr. 336.00

Cont.

- Mob to site, conduct brief safety meeting
- Fabricate spools with new piping, flanges
- Install all new spools, motor, check valve
- Bolt up & align to new discharge center line
- Fabricate new pipe stands

Service Truck with Welder and 1 Man Crew

Est. 40 Hrs. @ \$185/Hr. 7,400.00  
Est. OT 8 Hrs. @ \$60/Hr. 480.00 13,946.00

Outside Service

- Program existing VFD panel for 400 HP motor 1,620.00

*Subtotal Labor and Materials* \$93,104.59

*Total Labor and Materials* \$ 285,524.59

If you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Sincerely,

**GENERAL PUMP COMPANY, INC.**

*Tom Nanchy*

Tom Nanchy  
Sr. Project Manager/ Project Engineer