4.201 APPLICATION SUBMISSION REQUIREMENTS

In addition to the materials listed at Section 2.303, applications for a permit to locate or construct a major new domestic water or sewage treatment system and/or major extension thereof shall be accompanied by the following information, in the number required by the Director:

(1) Preliminary review and comment on the proposal by the appropriate agency of the Colorado Department of Natural Resources and the Colorado Department of Public Health and Environment within sixty (60) days of the date of submittal of the proposal for review.

A Basis of Design Report was submitted to the CDPHE and approval was received on September 29. The report and approval are included in Appendix I.

(2) Scope of Proposal

(a) Provide detailed plans of the proposal, including proposed system capacity and service area plans mapped at a scale acceptable to the Department.

Preliminary construction plans are included in Appendix B. The proposed tank site service area is included in maps attached in Appendix J.

(b) Provide a description of all existing or approved proposed domestic water or sewage treatment systems within the Project area.

There are no proposed domestic water or sewage treatment systems within the proposed service area of the tank site. See Appendix J for maps of the tank site service area. The District owns and operates a water and wastewater system that serves existing customers within their service area. A brief description of each system is included below.

Water for the tank site will be provided from the existing WWSD water sources. The WWSD water system has two sources of water, surface water from the Fountain Valley Authority (FVA) system and groundwater. The FVA surface water is transferred through a pipeline from Pueblo Reservoir, treated by the Authority and delivered to WWSD for consumption. The District also utilizes groundwater from the Widefield and Jimmy Camp aquifers. Groundwater from the Widefield aquifer is treated at two water treatment plants owned and operated by WWSD for disinfection and PFAS removal. Groundwater wells in the Jimmy Camp Aquifer are disinfected individually. The proposed 2MG tank will not require WWSD to bring on any new water sources.

The WWSD wastewater treatment plant is located near Highway 16 and Highway 85/87 and provides secondary treatment. The plant is currently rated for a hydraulic design capacity of 2.14 million gallons per day (MGD) and is permitted under Site Application #4417.

(c) Describe the design capacity of each domestic water or sewage treatment system facility proposed and the distribution or collection network proposed in the Project area.

The proposed project does not include water treatment facilities or distribution systems. The proposed potable water tank will convey water through the existing distribution system and the proposed additional 1 mile of pipe to the proposed pressure zone within the WWSD existing service area. The proposed 12" and 16" water lines will become part of the future

distribution system when and if development occurs in their vicinity. Additional distribution lines will be required to provide water service to proposed future development. The 24" portion of the proposed water line will serve only as a transmission line to/from the tank and was sized to accommodate a maximum flowrate of 5,000 gpm to serve the future buildout of the tank site.

(d) Describe the excess capacity of each treatment system and distribution or collection network in the affected community or Project area.

No treatment systems or collection networks are proposed in the project area. The 12" and 16" portions of the proposed water line are anticipated to serve as distribution lines to serve future development. If and when future development occurs, these water lines and additional infrastructure will be required. The tank site proposed is sized to allow for the construction of additional water storage tanks and a booster pump station if needed in the future and as noted above, the 24" water line proposed was sized to serve as the transmission line to/from the tank site for the full site buildout. The Rolling Hills Booster Pump Station was designed to allow for additional pumps to be added to the station as needed to meet demand. WWSD utilizes approximately 48% of it's current water treatment capacity and therefore has 52% excess capacity available. The table below outlines WWSD's water treatment capacity. See Appendix P for the WWSD Water and Wastewater 2019 Report.

Water Treatment Capacity of Widefield Water and Sanitation District

Facility	Water Treatment Capacity	Status
Fountain Valley Authority System	892 gpm	Operating
Venetucci	737 gpm	In Design
Southmoor	2,200 gpm	Operating
Fontaine	500 gpm	Operating
Widefield Mitigation Facility	3,300 gpm	Under Construction
Jimmy Camp Wells – Direct Source	750 gpm	Operating

Currently WWSD provides water service to areas within the proposed Rolling Hills Tank site service area. These areas are shown on the tank service area map included in Appendix J1. A summary of each area is included below.

- ***Potable water is provided to the VA Pikes Peak National Cemetery. A small 30,000-gallon interim tank and small booster pump station are utilized to bring water to the cemetery. The small interim tank would be taken out of service when the 2 MG ground storage tank is constructed in 2021. The small booster pump station will be taken out of service when and if an elevated tank and/or booster pump station is constructed on the proposed tank site. Both the small booster pump station and the small interim tank are located on the VA PPNC site and cannot be utilized to serve additional demands in the tank service area.***
- ***Potable water is currently provided to residents in the Peaceful Valley Estates, Lorson Filing 3 and may be provided to Lorson A & B out of WWSD's pressure zone 5 that floats off of their ground storage tank located at the Goldfield Tank Site. This zone will eventually be served by the proposed tank site since it would provide higher service pressure.***

WWSD cannot provide service to additional areas within the proposed tank site service area until the proposed Rolling Hills 2 MG Potable Water Tank and Inlet Pipeline is constructed. See Section 2.102 (7) Land Use (i) for a summary of projected demands that will be served by the proposed tank site.

(e) Provide an inventory of total commitments already made for current water or sewage services.

No additional water or sewage service commitments are proposed as part of this project. The proposed tank and associated water transmission line will provide service for customers within WWSD's existing service area. Total existing commitments for current water services within the Rolling Hills Tank Site service area (as show in Appendix J) is included below.

Entity	Schedule #	WWSD Water Service Commitment
Lorson (A)	5500000403	90 Dwelling Units
Lorson (B)		100 Dwelling Units
Love in Action (Lorson C, E and G)	5500000371	373 Dwelling Units
Lorson Filing 3 (Eastern Portion)	5500000431	81 Dwelling Units
Peaceful Lakes Estates	Multiple	78 SFEs
VA PPNC Irrigation	5500000384	200 gpm
VA PPNC – Domestic	5500000384	78 SFEs

(f) Describe the operational efficiency of each existing system in the Project area, including the age, state of repair and level of treatment.

The proposed 2 MG Rolling Hills ground storage tank will be filled utilizing the Rolling Hills Booster Pump Station and water distribution system both constructed as part of the WWSD Veteran Affairs Pikes Peak National Cemetery Water Delivery System project that was completed in 2018. The system is in good repair and the water conveyed by the system is treated to meet all existing CDPHE standards.

(g) Describe the existing water utilization, including the historic yield from rights and use by category such as agricultural, municipal, and industrial supply obligations to other systems.

WWSD's existing water supply includes imported surface water from the Fountain Valley Authority (FVA) system and alluvial groundwater wells that pump within the Widefield and Jimmy Camp aquifers.

Water from these sources is treated, disinfected, stored, and delivered to residential units and commercial taps within the existing WWSD service area. Water rights stipulate that water can be used for the following purposes:

- ***Domestic***
- ***Livestock watering***
- ***Lawn irrigation***
- ***Commercial***
- ***Industrial***
- ***Replacement supply***

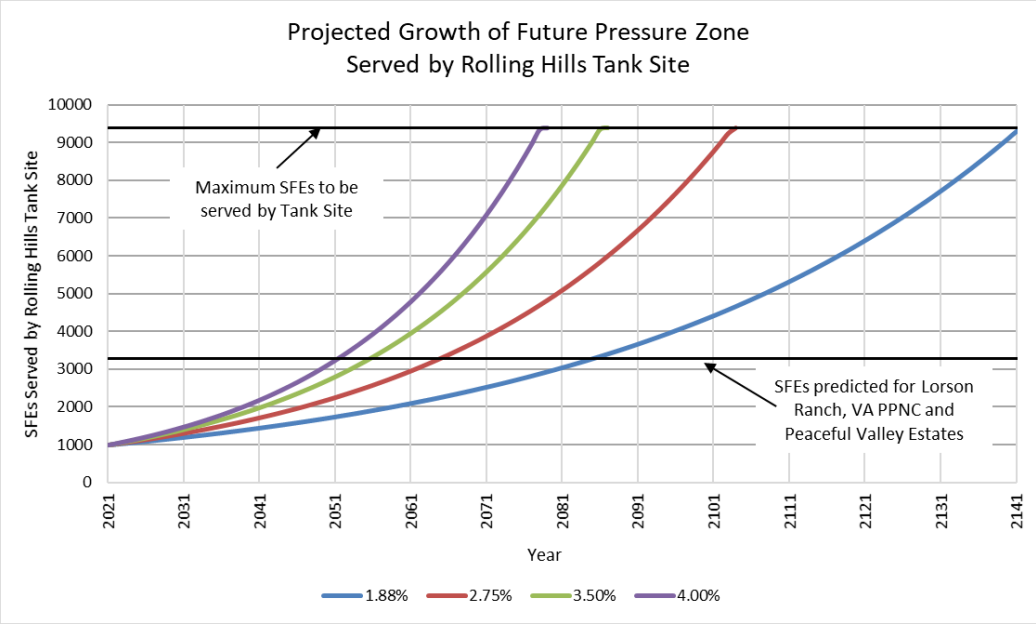
Currently, there are no obligations to supply water to other systems. WWSD does, at times, sell water to other systems but the transactions are one-time purchases and are

not continuing obligations. See Appendix P for the District's 2019 Water and Wastewater Report.

(3) Demonstration of Need

(a) Provide population trends for the Project area, including present population, population growth and growth rates, documenting the sources used.

Note that the proposed tank site and associated water transmission line will serve property within the existing WWSD service area. No new service areas are proposed as part of this project. That being said, projected growth of the future pressure zone that will be served by the Rolling Hills Tank Site was considered for historic growth rates within the WWSD service area and El Paso County growth factors for low (2.75%), medium (3.5%), and high (4%) as shown in the chart below. Initial demands will include the domestic and irrigation demands for the VA Pikes Peak National Cemetery and 100-200 homes on the parcels in Lorson Ranch on the western side of the power lines that will be initially served by the existing Pressure Zone 5. The chart presented is based on an initial gross assumption of 1000 SFEs in the year 2021 which is likely conservative, but the initial years of growth may be understated.



(b) Specify the predominant types of developments to be served by the proposed new water and/or sewage systems or extensions thereof.

The land within the WWSD service area that the tank will serve is zoned PUD so residential is the predominant type of development that will be served.

(c) Specify at what percentage of the design capacity the current system is now operating:
   i. Water treatment system.
   ii. Wastewater treatment system.

WWSD utilizes approximately 48% of its existing available physical water supply and therefore has 52% excess capacity available. The table included in 4.201 (2) (d) outlines WWSD's water treatment capacity.
The WWSD wastewater treatment plant is currently rated for a hydraulic design capacity of 2.14 million gallons per day (MGD) and organic capacity of 5,416 lb/day Biochemical Oxygen Demand BOD. The plant is currently operating at 69% of hydraulic loading capacity and 78% organic loading capacity.

See Appendix P for the WWSD's 2019 Water and Wastewater Report.

(d) Specify whether present facilities can be upgraded to accommodate adequately the ten-year projected increase needed in treatment and/or hydraulic capacity.

Note that the proposed tank does not increase the WWSD service area and therefore does not in itself increase hydraulic capacity or require additional water treatment. The proposed 2 MG tank will be filled by the existing Rolling Hills Booster Pump Station and the water line installed as part of the VA Pikes Peak National Cemetery Water Delivery System constructed in 2018. The booster pump station was designed to accommodate pumps that can meet the ten-year projected increase in hydraulic capacity and will only require two new, larger pumps to be purchased and installed. The existing 12-inch water line that will convey water to the tank is projected to accommodate the ten-year projected increase in hydraulic capacity. The transmission water line proposed as part of this project is sized to accommodate full build out of the future tank service area.

(4) Description of the water to be used by the Project and, to the extent identified by the Director in consultation with the applicant, alternatives, including: the source, amount, the quality of such water; the applicant's right to use the water, including adjudicated decrees or determinations and any substitute water supply plans, and applications for decrees or determinations; proposed points of diversion and changes in the points of diversion; the existing uses of the water; adequate proof that adequate water resources have been or can and will be committed to and retained for the Project, and that applicant can and will supply the Project with water of adequate quality, quantity, and dependability; and approval by the respective Designated Ground Water Management District if applicable. If an augmentation or replacement plan for the Project has been decreed or determined or an application for such plan has been filed in the court or with the Ground Water Commission, the applicant must submit a copy of that plan or application.

The proposed tank and associated water transmission line will not change the water rights utilized or held by WWSD. WWSD has substantial water rights which are more than adequate to provide water for the service area of the proposed tank site. The project will serve property within the existing WWSD service area boundaries and the water stored and conveyed by the proposed tank and associated water transmission line will be from existing, approved water sources that the District has all necessary water rights for.

(5) Loss of Agricultural Productivity

(a) Information on any agricultural water rights in the region converted to provide water for the Project, now or in the future.

Conversion of agricultural water rights are not proposed for this project.

(b) Information on the amount of irrigated agricultural lands taken out of production, and a description of revegetation plans.

No irrigated agricultural lands will be taken out of production for the implementations of the proposed project.

(c) Economic consequences of any loss of irrigated agriculture, including loss of tax base, in the region.

No irrigated agricultural lands will be taken out of production for the implementation of the proposed project.

(d) Information as to loss of wildlife habitat, loss of topsoil, or noxious weed invasion, as a result of the transfer of water rights and subsequent dry-up of lands.

No water is being transferred, converted or taken out of beneficial use that has been previously used for agricultural purposes.

(e) Information on impacts to agricultural head gates and water delivery systems.

This project will have no impact on agricultural head gates or water delivery systems.

(6) The financial impact analysis of site selection and construction of major new water and sewage treatment facilities and/or major extension of existing domestic water and sewage treatment systems shall include but need not be limited to the following items:

(a) A review and summary of any existing engineering and/or financial feasibility studies, assessed taxable property valuations and all other matters of financial aid and resources in determining the feasibility of the proposed new facility, including:

i. Service area and/or boundaries.
The proposed tank site and water line are within the boundaries of the District (see Appendix A). The service area of the proposed tank is depicted in Appendix J.

ii. Applicable methods of transmitting, storing, treating and delivering water and collecting, transmitting, treating and discharging sewage, including effluent and/or sludge disposal.

Treated water from existing sources and existing water treatment plants within the existing WWSD service area will be pumped by the existing Rolling Hills Booster Pump Station through the existing 12 inch water main up to the tie in point for the proposed water transmission main that will carry water to the proposed tank. When the tank reaches a predefined water level, the booster pump station will shut off and water will flow from the proposed tank and transmission line back into the distribution system to provide system pressure.

iii. Estimated construction costs and period of construction of each new or extension facility component.

The estimated construction costs for the 2 MG Potable water tank and associated water line is approximately $3,630,000. Construction is anticipated to begin February of 2021 and be completed by January of 2022. The preliminary cost estimate is included in Appendix L.

iv. Assessed valuation of the property to be included within the service area boundaries.

The assessed value of the property within the tank site service area was estimated per the El Paso County Assessor's site and is included in the table below. See Appendix J1 for a depiction of the areas called out in the table below. See Appendix L for printouts of the assessed values of the properties from the El Paso County Assessor's site.

Entity	Schedule #	Area in Acres	Assessed Value (per County Assessor Website)
Ground Storage			
CS2005 (F)	5500000385	220.00	$1,815.01
CS2005 (D)	5500000383	48.00	$395.52
CS2005 (E)	5500000383	50.00	$412.00
Bull Hill (A)	5500000324	564.51	$4,660.58
Lorson (A & B)	5500000403	28.67	$240.00
Lorson Filing No 3*	Various	22.00	$117,450.00
Love in Action	5500000371	276.97	$2,290.00
Love in Action	5500000367	45.31	$370.00
Love in Action	5500000368	21.00	$170.00
Love in Action	5500000369	14.00	$120.00
Love in Action	5500000370	35.00	$290.00
Peaceful Lakes Estates *	Various	487.00	$629,460.00
Total		**1812**	$757,673.11
Elevated Tank			
VA PPNC	5500000384	380.00	$0.00
CS2005 (A)	5500000385	415.00	$3,423.77
CS2005 (B)	5500000385	167.42	$1,381.22
CS2005 (C)	5500000383	27.00	$222.48
Bull Hill (B)	5500000324	29.00	$239.42
Total		**1018**	$5,266.89

** Estimated*

iv. Revenues and operating expenses of the proposed new or extension facility, including but not limited to historical and estimated property taxation, service charges and rates, assessments, connection and tap fees, standby charges and all other anticipated revenues of the proposed new facility.

The proposed tank and associated water main will allow WWSD to gain revenue in the future as new taps are added to the system that are supported by the tank. The tank is proposed as concrete so little to no tank maintenance is anticipated in for 60+ years. The current WWSD 2020 Rates and Fees are noted below.

Widefield Water and Sanitation District - 2020 Rates and Fees

Water Rates & Base Charge

1 **Water Base Charge**

Meter Size	$ Per Month
Up to 3/4"	$19.50
1 "	$46.57
1 1/2 "	$91.70
2 "	$145.87
3 "	$290.32
4 "	$452.81
6 "	$904.15
8 "	$1,445.88

2 **Water Volume Charge**

	$ per 1,000 Gal
Residential;	
1st 5,000 Gallons	$4.35
Over 5,000 Gallons	$5.21
Commercial;	
Uniform Rate	$4.81
Wholesale/Bulk Rate;	
Per 1,000 gallons	$4.50

Tap Fees & Water Acquisition Fee

5 **Water Tap Fees**

Tap Size			Tap Fee $
3/4 "	=	1.0 SFE	$5,750
1 "	=	2.5 SFE	$14,375
1 1/2 "	=	5.0 SFE	$28,750
2 "	=	8.0 SFE	$46,000
3 "	=	16.0 SFE	$92,000
4 "	=	25.0 SFE	$143,750
6 "	=	50.0 SFE	$287,500
8 "	=	80.0 SFE	$460,000

6 **Water Acquisition Fee**

Tap Size			Tap Fee $
3/4 "	=	1.0 SFE	$7,000
1 "	=	2.5 SFE	$17,500
1 1/2 "	=	5.0 SFE	$35,000
2 "	=	8.0 SFE	$56,000
3 "	=	16.0 SFE	$112,000
4 "	=	25.0 SFE	$175,000
6 "	=	50.0 SFE	$350,000
8 "	=	80.0 SFE	$560,000

v. Amount and security of the proposed debt and method and estimated cost of debt service.

WWSD will not take on debt to construct the proposed tank and associated water line. The project will be developer financed by the Eagle Development Company.

vi. Provide the details of any substantial contract or agreement for revenues or for services to be paid, furnished or used by or with any person, association, corporation or governmental body.

The proposed tank and associated water main will allow WWSD to gain revenue in the future as new taps are added to the system that are supported by the tank but the project in itself does not provide revenue to the District. A cost allocation agreement will be developed to allow reimbursement of the tank and associated water main as future development occurs.

Appendix L

Financial Impact Analysis
L1 - Printouts Showing Assessed Value of Property within Tank Site Area
L2 – Preliminary Cost Estimate

EL PASO COUNTY - COLORADO

5500000385
BRADLEY RD

CS2005 A, B, AND F ON MAP IN APPENDIX J

Total Market Value
$22,829

OVERVIEW

Owner:	**CS 2005 INVESTMENTS LLC, C/O ROBERT M EVANS**
Mailing Address:	**250 PILOT ROAD ST#140 LAS VEGAS NV, 89119-3543**
Location:	**BRADLEY RD**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN SECS 1, 2, 11 & 12-15-65 DESC AS FOLS: COM AT NE COR OF SD SEC 1 SD PT BEING POB, TH S 00<04'44" E ALG E LN OF NE4 SEC 1 2643.43 FT TO E4 COR OF SD SEC 1, TH S 00<04'53" E 2609.66 FT TO A PT ON THE N R/W LN OF BRADLEY RD, TH S 89<50'39" W 1124.04 FT, TH ALG ARC OF CUR TO L HAVING A RAD OF 5105.0 FT A C/A OF 13<39'41" A DIST OF 1217.22 FT, TH S 76<10'58" W 5797.66 FT TO A PT ON W LN OF NE4 SEC 11, TH N 00<10'04" W 1392.70 FT TO N4 COR OF SEC 11, TH N 00<23'37" W ALG E LN OF SW4 SEC 2 1319.07 FT TO NE COR OF S2 SEC 2, S 89<37'54" W ALG N LN OF S2SW4 SEC 2 1964.31 FT TO NW COR OF W2SW4SW4 SEC 2, TH N 05<50'18" E 2540.30 FT, N 36<32'24" E 1604.90 FT, N 16<58'50" E 184.45 FT TO A PT ON N LN OF NW4 SEC 2, TH N 89<23'49" E 668.25 FT TO N4 COR OF SEC 2, TH N 89<23'28" E 2668.77 FT TO NE COR OF SEC 2, TH N 89<21'45" E 2657.57 FT, TH N 89<19'28" E 2667.46 FT TO POB, EX TRS DESC BY REC #207001680 THRU 207001689, EX POR DESC BY REC #214004738**

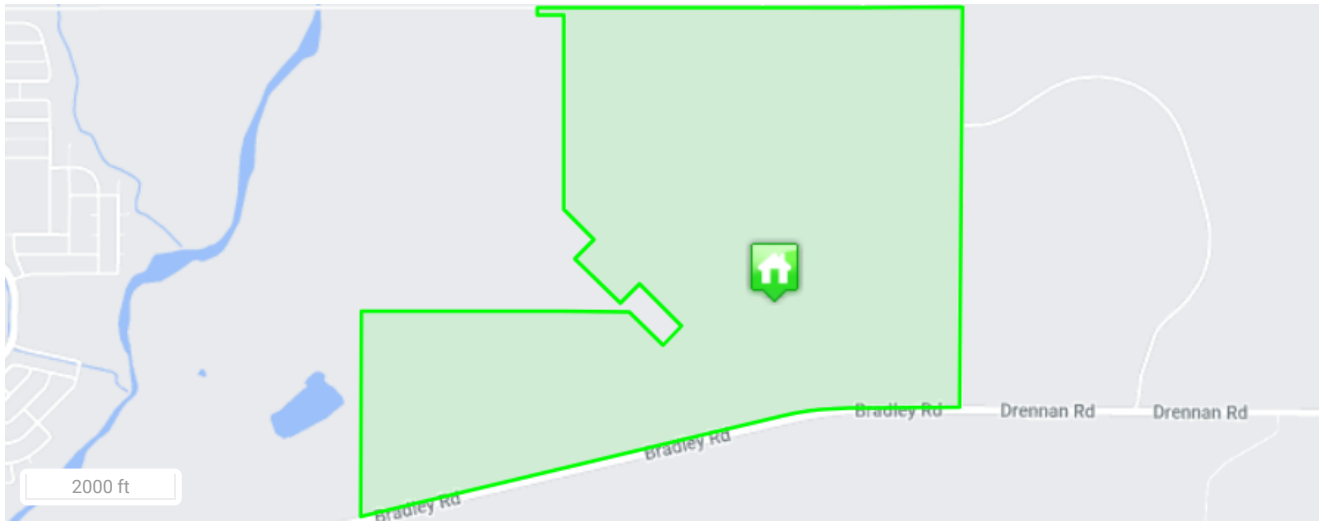
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$22,829**	**$6,620**
Improvement	**$0**	**$0**
Total	**$22,829**	**$6,620**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	802.42 Acres	$22,829



EL PASO COUNTY - COLORADO

5500000383
11-15-65, 12-15-65

CS2005 C, D, AND E ON MAP IN APPENDIX J

Total Market Value
$3,549

OVERVIEW

Owner:	**CS 2005 INVESTMENTS LLC, C/O ROBERT M EVANS**
Mailing Address:	**250 PILOT ROAD ST#140 LAS VEGAS NV, 89119-3543**
Location:	**11-15-65, 12-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN NE4 SEC 11 & NW4 SEC 12-15-65 DESC AS FOLS: BEG AT C4 COR OF SD SEC 11, TH N 00<10'04" W 1033.36 FT TO A PT ON S R/W LN OF BRADLEY RD, TH N 76<10'58" E 4694.01 FT, TH ALG ARC OF CUR TO L HAVING A RAD OF 3000.00 FT A C/A OF 35<53'49" WHICH CEN BEARS S 54<13'04" E 1879.56 FT, TH S 00<06'53" E 355.87 FT TO SE COR OF W2NW4 SEC 12, TH S 89<17'26" W 1323.85 FT, TH S 89<31'36" W ALG S LN OF NW4 SEC 11 2665.93 FT TO POB, EX THAT PT DESC BY REC #214000553**

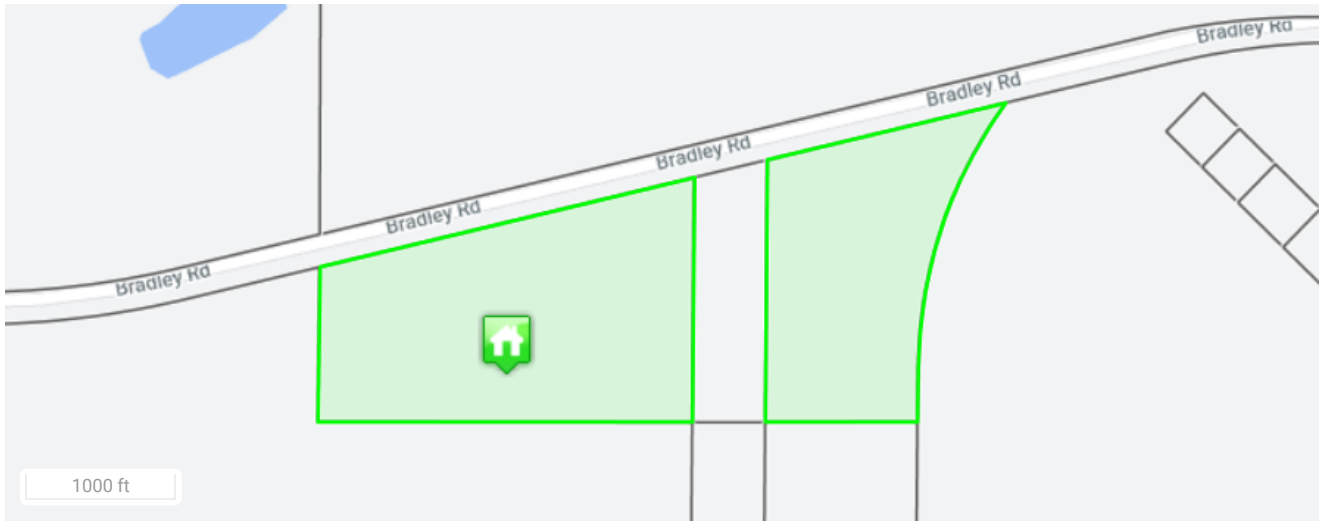
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$3,549**	**$1,030**
Improvement	**$0**	**$0**
Total	**$3,549**	**$1,030**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	124.76 Acres	$3,549



EL PASO COUNTY - COLORADO

5500000324
12-15-65, 13-15-65

BULL HILL A & B ON MAP IN APPENDIX J

Total Market Value
$16,885

OVERVIEW

Owner:	**BULL HILL LLC**
Mailing Address:	**3 WIDEFIELD BLVD COLORADO SPRINGS CO, 80911-2126**
Location:	**12-15-65, 13-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN SECS 12 & 13-15-65 DESC AS FOLS: COM AT NE COR OF SD SEC 12, TH S 00<16'58" E 179.72 FT FOR POB, TH CONT S 00<16'58" E ALG E LN OF NE4 SEC 12 2455.51 FT TO E4 COR OF SD SEC 12, TH S 00<18'37" E ALG E LN OF SE4 OF SD SEC 12 2635.48 FT TO SE COR OF SEC 12, TH S 00<19'49" E 2687.08 FT TO E4 COR OF SEC 13, TH S 89<26'00" W 2662.93 FT TO C4 COR OF SEC 13, TH N 00<21'41" W 2636.75 FT TO N4 COR OF SEC 13, TH S 89<25'09" W 1323.33 FT TO SW COR OF E2SW4 SEC 12, TH N 00<07'57" W 2644.55 FT TO NW COR OF THE E2SW4 SEC 12, TH N 00<07'57" W 355.87 FT, TH ALG ARC OF CUR TO R HAVING A RAD OF 3000.0 FT A C/A OF 35<53'49" A DIST OF 1879.56 FT TO A PT ON THE S R/W LN OF BRADLEY RD, TH N 76<10'58" E 1154.67 FT, TH ALG ARC OF CUR TO R HAVING A RAD OF 4895.0 FT A C/A OF 13<39'41" AN ARC DIST OF 1167.15 FT, TH N 89<50'39" E 1124.39 FT TO POB, EX TRS DESC BY REC #207001690 THRU 207001694**

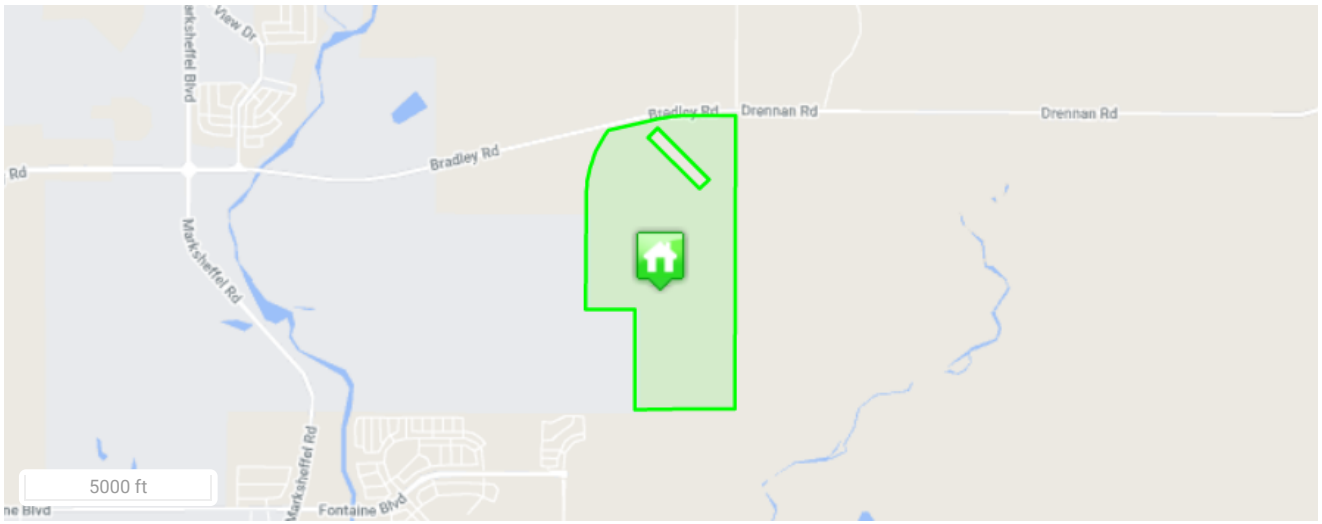
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$16,885**	**$4,900**
Improvement	**$0**	**$0**
Total	**$16,885**	**$4,900**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	593.51 Acres	$16,885



EL PASO COUNTY - COLORADO

LORSON A & B ON MAP IN APPENDIX J

5500000403
SEC 13-15-65

Total Market Value
$816

OVERVIEW

Owner:	**LORSON LLC NOMINEE FOR, MURRAY FOUNTAIN LLC**
Mailing Address:	**212 N WAHSATCH AVE STE 301 COLORADO SPRINGS CO, 80903-3476**
Location:	**SEC 13-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN S2 SEC 13, N2 SEC 24 & NE4 SEC 23-15-65 DESC AS FOLS: COM AT THE COMMON COR OF SECS 13, 14, 23, & 24 FROM WHICH THE COMMON COR OF SECS 14, 15, 22 & 23 BEARS S 89<43'15" W 5294.45 FT & THE SE COR OF SEC 13 BEARS N 89<18'33" E 5322.91 FT, TH S 77<15'32" E 1431.33 FT FOR POB, TH S 38<22'41" W 689.46 FT, S 79<36'36" E 368.04 FT, S 38<22'41" W 257.67 FT, N 79<36'36" W 368.04 FT, N 38<22'41" E 48.69 FT, TH NWLY ALG ARC OF CUR TO A PT TANG BEING CONCAVE TO THE S HAVING A RAD OF 1460.0 FT A C/A OF 01<58'06" WHICH CHORD BEARS N 89<00'57" W 50.16 FT, TH N 90<00'00" W 1107.73 FT, N 00>00'00" E 180.22 FT, TH ALG ARC OF CUR TO THE R HAVING A RAD OF 367.50 FT A C/A OF 76<39'36" WHICH CHORD BEARS N 38<19'48" E 455.84 FT, TH N 76<39'36" E 420.38 FT, TH ALG ARC OF CUR TO THE L HAVING A RAD OF 632.50 FT A C/A OF 76<39'36" WHICH CHORD BEARS N 38<19'48" E 784.54 FT, TH N 00<00'00" W 1109.69 FT, TH ALG ARC OF CUR TO THE R HAVING A RAD OF 467.5 FT A C/A OF 87<50'52" WHICH CHORD BEARS N 43<55'26" E 648.61 FT, TH N 87<50'52" E 857.13 FT, TH ALG ARC OF CUR TO THE L HAVING A RAD OF 732.5 FT A C/A OF 28<47'37" WHICH CHORD BEARS N 73<27'04" E 364.25 FT, TH N 59<03'15" E 303.50 FT, TH NWLY ALG ARC OF CUR TO A PT TANG BEING CONCAVE TO THE NE HAVING A RAD OF 460.0 FT A C/A OF 34<31'50" WHICH CHORD BEARS N 17<43'55" W 273.05 FT, TH N 00<28'00" W 299.77 FT, N 89<32'00" E 1070.44 FT ALG N LN OF S2 SD SEC 13, TH S 38<22'41" W 2084.38 FT, S 51<37'19" E 325.0 FT, S 38<22'41" W 457.99 FT, N 71<15'45" W 345.08 FT, S 38<22'41" W 1148.35 FT TO POB, LY W/IN REC #204201653, EX THAT PT CONV BY REC #206041590, EX PT PLATTED TO PIONEER LANDING AT LORSON RANCH FIL NO 2, EX ALL THAT PT LY SLY OF SD PIONEER LANDING AT LORSON RANCH FIL NO 2**

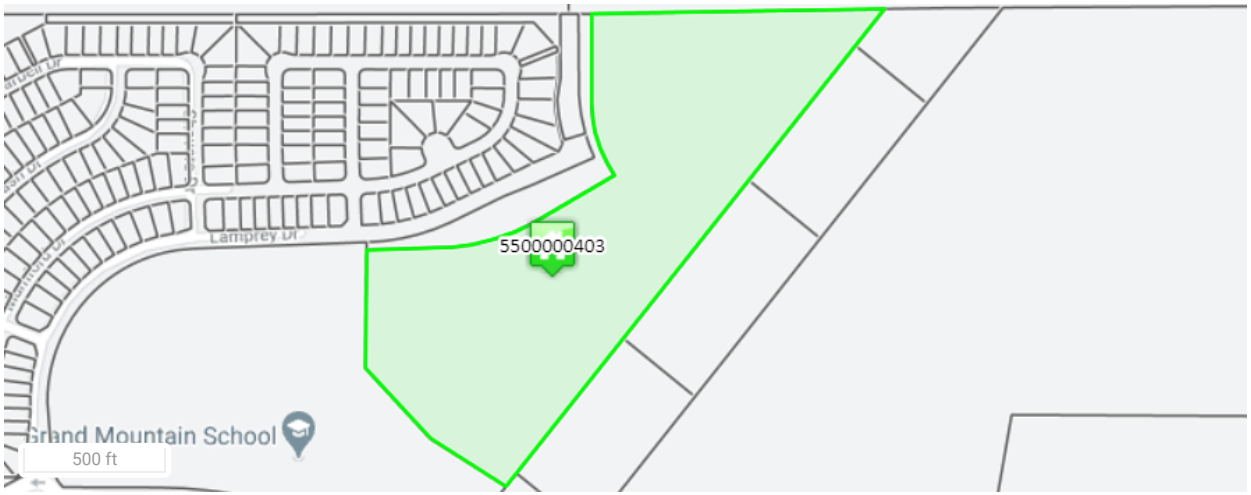
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$816**	**$240**
Improvement	**$0**	**$0**
Total	**$816**	**$240**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	28.67 Acres	$816



EL PASO COUNTY - COLORADO

5500000371

SEC 13-15-65, SEC 24-15-65

LOVE IN ACTION ON MAP IN APPENDIX J

Total Market Value
$7,880

OVERVIEW

Owner:	**LOVE IN ACTION**
Mailing Address:	**212 N WAHSATCH AVE STE 301 COLORADO SPRINGS CO, 80903-3476**
Location:	**SEC 13-15-65, SEC 24-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN S2 SEC 13, N2 SEC 24 & NE4 SEC 23 DESC AS FOLS: COM AT THE COMMON COR OF SECS 13, 14, 23, & 24 FROM WHICH THE COMMON COR OF SECS 14, 15, 22, & 23 BEARS S 89<43'15" W 5294.45 FT & SE COR SEC 13 BEARS N 89<18'33" E 5322.91 FT, TH S 00<19'52" E 2583.16 FT FOR POB, TH N 38<22'41" E 4960.47 FT, N 51<37'19" W 325.0 FT N 38<22'41" E 708.10 FT, S 51<37'19" E 325.0 FT, N 38<22'41" E 603.14 FT, N 51<37'19" W 325.0 FT, N 38<22'41" E 170.0 FT, N 89<32'00" E 1552.62 FT ALG N LN S2 SD SEC 13 TO E4 COR SD SEC 13, TH S 00<13'47" E 1417.82 FT ALG E LN S2 SD SEC 13, TH S 89<45'29" W 1109.06 FT, S 09<24'34" W 1144.41 FT, S 07<44'22" W 120.87 FT, S 08<53'14" W 842.69 FT, S 54<48'22" E 233.42 FT, S 81<48'41" E 206.03 FT, S 87<48'34" E 306.37 FT, S 88<45'18" E 304.44 FT, N 89<42'44" E 445.72 FT, S 00<11'14" E 1582.50 FT ALG E LN N2 SD SEC 34 TO E4 COR SD SEC 24, TH S 89<25'43" W 5287.26 FT ALG S LN N2 SD SEC 24 TO W4 COR SD SEC 24, TH S 89<41'52" W 28.94 FT ALG S LN N2 SD SEC 23, TH N 00<19'53" W 54.88 FT TO POB, EX PARCEL 1 & 2 CONV TO COUNTY BY REC #212047865**

MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$7,880**	**$2,290**
Improvement	**$0**	**$0**
Total	**$7,880**	**$2,290**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	276.97 Acres	$7,880

EL PASO COUNTY - COLORADO

LOVE IN ACTION ON MAP IN APPENDIX J

5500000367
SEC 13-15-65

Total Market Value
$1,289

OVERVIEW

Owner:	**LOVE IN ACTION**
Mailing Address:	**212 N WAHSATCH AVE STE 301 COLORADO SPRINGS CO, 80903-3476**
Location:	**SEC 13-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN S2 SEC 13 & N2 SEC 24-15-65 DESC AS FOLS;BEG AT SE COR SD SEC 13, TH S00<11'14"E 1066.83 FT, N89<42'44"W 438.0 FT M/L, N88<45'18"W 304.0 FT M/L, N87<48'34"W 306.0 FT M/L, N81<48'41"W 206.0 FT M/L, N54<48'22"W 233.0 FT M/L, N08<53'14"E 843.0 FT M/L, N07<44'22"E 120.0 FT M/L, N09<24'34"E 1145.0 FT M/L, N89<45'29"E 1099.0 FT M/L, TH S00<12'34"E 1205.0 FT M/L TO POB, EX TR CONV TO COUNTY BY REC #212047865**

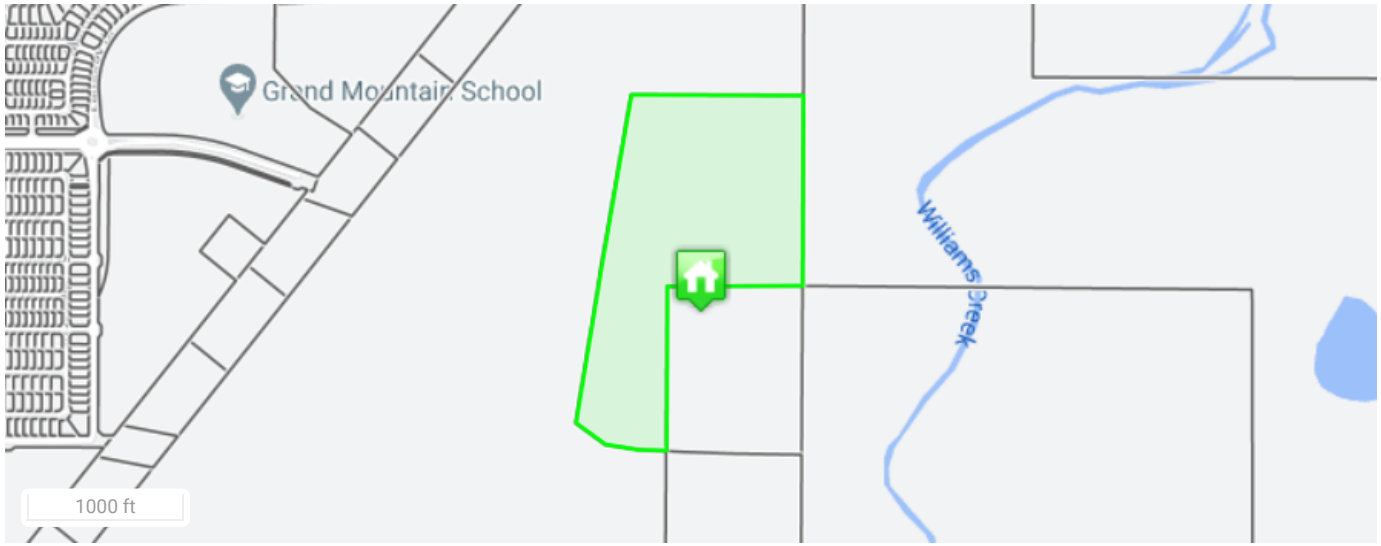
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$1,289**	**$370**
Improvement	**$0**	**$0**
Total	**$1,289**	**$370**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	45.31 Acres	$1,289



EL PASO COUNTY - COLORADO

5500000368
SEC 24-15-65

LOVE IN ACTION ON MAP IN APPENDIX J

Total Market Value
$597

OVERVIEW

Owner:	**LOVE IN ACTION**
Mailing Address:	**212 N WAHSATCH AVE STE 301 COLORADO SPRINGS CO, 80903-3476**
Location:	**SEC 24-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN NE4 SEC 24-15-65 DESC AS FOLS; BEG AT NE COR NE4 SD SEC 24, TH S00<11'14"E 1075.0 FT M/L, N89<42'44"W 445.0 M/L, N88<45'18"W 304.0 FT M/L, N87<48'34"W 120.0 FT M/L, N00<11'14"W 1025.0 FT M/L, N89<18'33"E 864.53 FT TO POB**

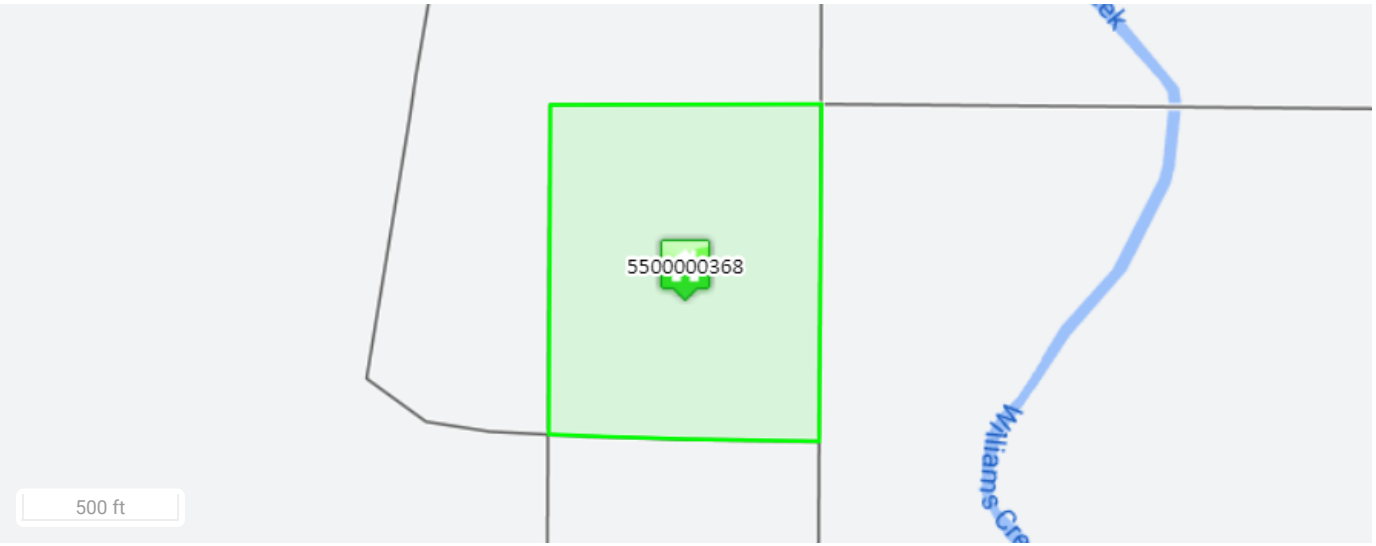
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$597**	**$170**
Improvement	**$0**	**$0**
Total	**$597**	**$170**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	21 Acres	$597



EL PASO COUNTY - COLORADO

5500000369
SEC 24-15-65

LOVE IN ACTION ON MAP IN APPENDIX J

Total Market Value
$398

OVERVIEW

Owner:	**LOVE IN ACTION**
Mailing Address:	**212 N WAHSATCH AVE STE 301 COLORADO SPRINGS CO, 80903-3476**
Location:	**SEC 24-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN NE4 SEC 24-15-65 DESC AS FOLS; COM AT E4 COR SD SEC 24, TH N00<11'14"E 881.97 FT FOR POB, TH S89<48'46"W 864.50 FT, TH N00<11'14"W 700.0 FT M/L, S87<48'34"E 120.0 FT M/L, S88<45'18"E 304.0 FT M/L, S89<42'44"E 445.0 FT M/L, S00<11'14"E 700.0 FT M/L TO POB**

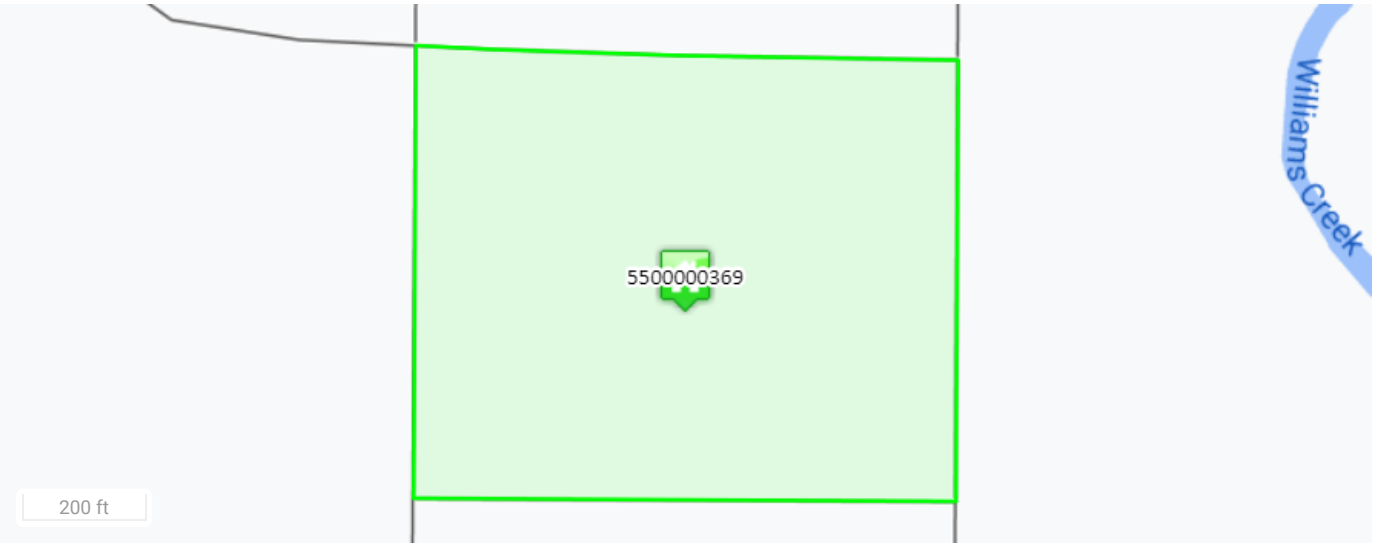
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$398**	**$120**
Improvement	**$0**	**$0**
Total	**$398**	**$120**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	14 Acres	$398



EL PASO COUNTY - COLORADO

5500000370
SEC 24-15-65

LOVE IN ACTION ON MAP IN APPENDIX J

Total Market Value
$996

OVERVIEW

Owner:	**LOVE IN ACTION**
Mailing Address:	**212 N WAHSATCH AVE STE 301 COLORADO SPRINGS CO, 80903-3476**
Location:	**SEC 24-15-65**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**-**
Legal Description:	**TR IN NE4 SEC 24-15-65 DESC AS FOLS; BEG AT E4 COR SD SEC 24, TH S89<25'43"W 2640.0FT, N00<34'17"W 427.54 FT, N89<25'43"E 1778.35 FT, N00<11'14"W 460.22 FT, N89<48'46"E 864.50 FT TO PT ON E LN SD NE4, S00<11'14"E 881.97 FT TO POB**

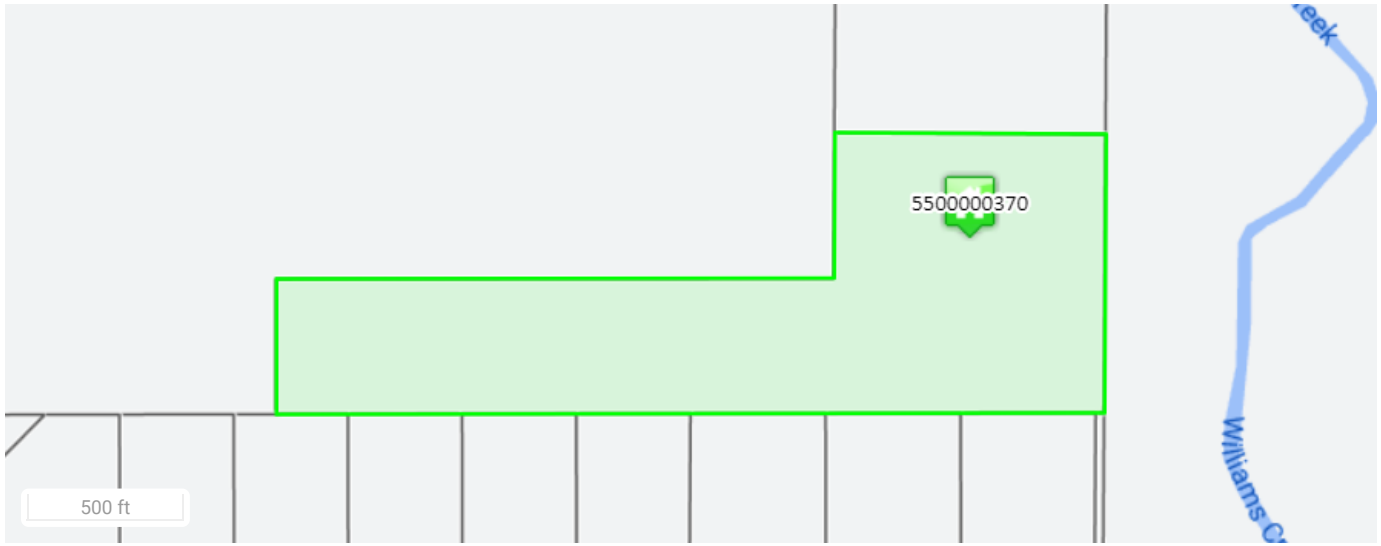
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$996**	**$290**
Improvement	**$0**	**$0**
Total	**$996**	**$290**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	AG. GRAZING LAND	29.000	35 Acres	$996



EL PASO COUNTY - COLORADO

5513309007
6015 YAMHILL DR

REPRESENTATIVE LOT IN LORSON FILING NO 3. 81 LOTS * $1450 =$117,450

Total Market Value
$5,000

OVERVIEW

Owner:	**CENTURY LAND HOLDINGS LLC**
Mailing Address:	**8390 E CRESCENT PKWY STE 650 ENGLEWOOD CO, 80111**
Location:	**6015 YAMHILL DR**
Tax Status:	**Taxable**
Zoning:	**PUD**
Plat No:	**14474**
Legal Description:	**LOT 27 LORSON RANCH EAST FIL NO 3**

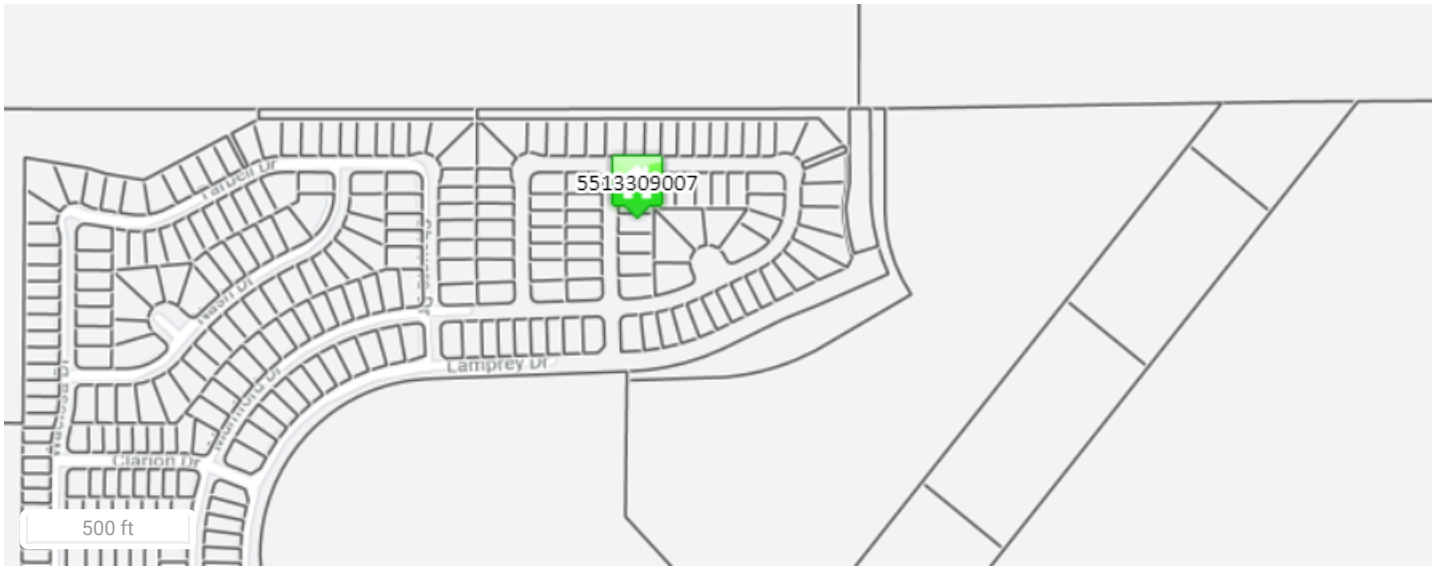
MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$5,000**	**$1,450**
Improvement	**$0**	**$0**
Total	**$5,000**	**$1,450**

No buildings to show.

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	CODE 100 AT PRESENT WORTH	29.000	7064 SQFT	$5,000



EL PASO COUNTY - COLORADO

5524003017
11350 GRASSLAND RD

REPRESENTATIVE LOT IN PEACEFUL LAKES ESTATES 78 LOTS * $8070 = $629,460

Total Market Value
$460,013

OVERVIEW

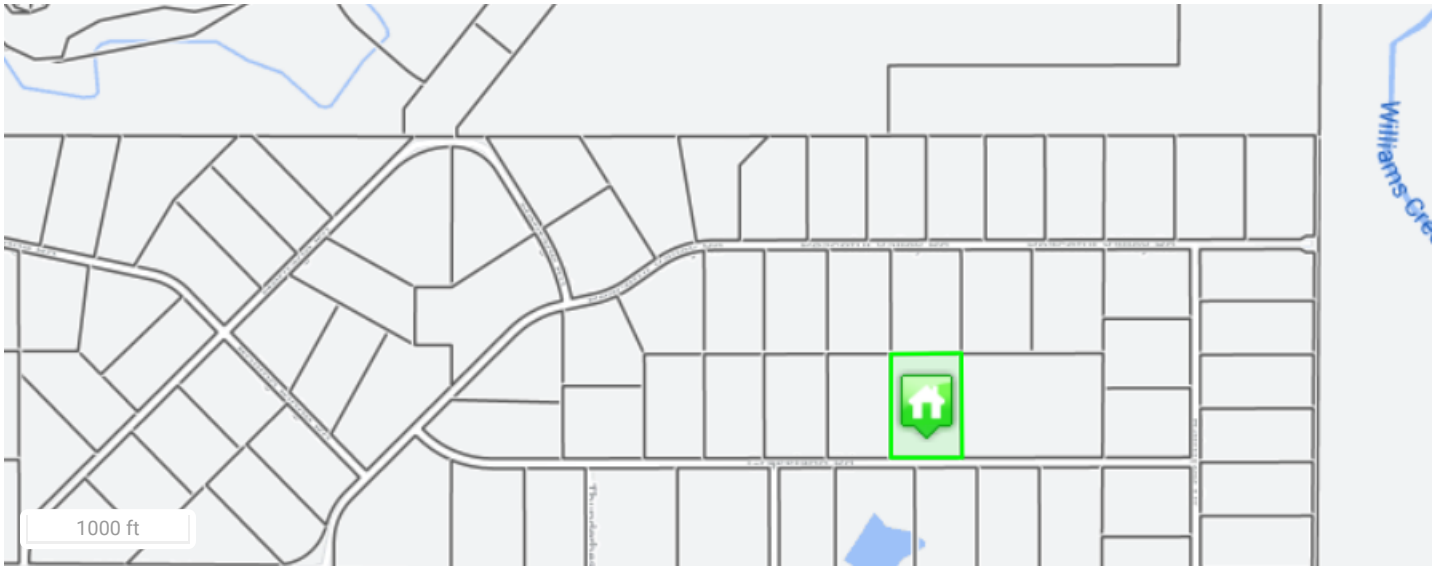
Owner:	**SEGURA RAMON A TRUSTEE, SEGURA MARIA M TRUSTEE, SEGURA LIVING TRUST**
Mailing Address:	**11350 GRASSLAND RD COLORADO SPRINGS CO, 80925-9517**
Location:	**11350 GRASSLAND RD**
Tax Status:	**Taxable**
Zoning:	**RR-5**
Plat No:	**2971**
Legal Description:	**LOT 6 BLK 4 PEACEFUL VALLEY LAKE ESTATES 1ST FIL**

MARKET & ASSESSMENT DETAILS

	Market Value	Assessed Value
Land	**$112,900**	**$8,070**
Improvement	**$347,113**	**$24,820**
Total	**$460,013**	**$32,890**

LAND DETAILS

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	SINGLE FAMILY RES.	7.150	6.27 Acres	$112,900



Preliminary Construction Estimate

Project: **2 MG Rolling Hills Tank**
Owner: Widefield Water and Sanitation District
Engineer: JDS-Hydro Consultants, Inc.
Contractor: TBD
Date 11/18/2020

Item #	Item Description	Quantity	Unit	Unit Cost	Amount
TANK and ACCESS ROAD					
1	General Conditions	1	LS	$40,950.00	$40,950.00
2	Mobilization	1	LS	$74,700.00	$74,700.00
3	Demobilization	1	LS	$38,350.00	$38,350.00
4	Project Closeout	1	LS	$5,550.00	$5,550.00
5	Excavation	2,750	CY	$35.00	$96,250.00
6	Structural Base	400	CY	$120.00	$48,000.00
7	Backfill and Grading	900	CY	$30.00	$27,000.00
8	Piping Penetrations	2	LS	$80,000.00	$160,000.00
9	Tank	1	LS	$1,400,000.00	$1,400,000.00
10	Preparation of Tank Construction Work Areas	1	LS	$50,000.00	$50,000.00
11	Passive Mixing System	1	LS	$100,000.00	$100,000.00
12	Passive Mixing System Installation	1	LS	$50,000.00	$50,000.00
13	Vault for Pressure Transmitter to Measure Tank Level	1	LS	$8,000.00	$8,000.00
14	Vault for Overflow/Drain Lines	1	LS	$8,000.00	$8,000.00
15	Chain Link Fence/Gate to Tank Site	1,020	LF	$45.00	$45,900.00
16	SCADA System to include PT and Solar Power System	1	LS	$40,000.00	$40,000.00
17	Yard Hydrant for Sampling	1	EA	$6,000.00	$6,000.00
18	Site Development Fees	1	LS	$5,000.00	$5,000.00
19	Field Piping to include overflow and drain line	1	LS	$38,550.00	$38,550.00
20	Disinfection and Testing	1	LS	$7,350.00	$7,350.00
21	Erosion Control	1	LS	$30,000.00	$30,000.00
22	Landscaping	1	LS	$40,950.00	$40,950.00
				TANK SUBTOTAL	**$2,320,550.00**
INLET PIPELINE					
1	General Conditions	1	LS	$17,220.00	$17,220.00
2	Mobilization	1	LS	$7,380.00	$7,380.00
3	Demobilization	1	LS	$7,380.00	$7,380.00
4	Project Closeout	1	LS	$3,690.00	$3,690.00
5	24" Transmission Pipeline	3,708	LF	$145.00	$537,660.00
6	16" Transmission Pipeline	372	LF	$72.00	$26,784.00
7	12" Transmission Pipeline	800	LF	$52.00	$41,600.00
8	Hydrants	3	EA	$11,660.00	$34,980.00
9	24" Gate Valves	7	EA	$42,915.00	$300,405.00
10	16" Valve	1	EA	$12,965.00	$12,965.00
11	12" Valve	1	EA	$4,485.00	$4,485.00
12	24" Tee	3	EA	$6,775.00	$20,325.00
13	24" 90 Degree Bend	1	EA	$5,195.00	$5,195.00
14	24" 45 Degree Bend	1	EA	$4,530.00	$4,530.00
15	24" 22.5 Degree Bend	2	EA	$4,430.00	$8,860.00
16	16" 45 Degree Bend	1	EA	$2,725.00	$2,725.00
17	16" x 12" Reducer	1	EA	$1,955.00	$1,955.00
18	24" x 6" Reducer	2	EA	$5,840.00	$11,680.00
19	Air/Vac Vault	2	EA	$19,745.00	$39,490.00
20	Clearing and Grubbing	1	LS	$5,780.00	$5,780.00
21	Erosion Control	1	LS	$16,915.00	$16,915.00
22	Access Road	1,750	LF	$19.00	$33,250.00
23	Drainage Improvements	1	LS	$50,425.38	$50,425.38
				INLET PIPELINE SUBTOTAL	**$1,195,679.38**
				SUBTOTAL	***$3,516,229.38***
				CONTINGENCY (+10%)	$351,622.94
				CONSTRUCTION TOTAL	**$3,867,852.32**

Since the Engineer has no control over the cost of labor, materials or equipment, or over the Contractor's method of determining prices, or over competitive bidding or market conditions, his opinions of probable construction cost provided for herein are made on the basis of his experience and qualifications. These opinions represent his best judgement as a design professional familiar with the construction industry. However, the Engineer cannot and does not guarantee that proposals, bids, or the construction cost will not vary from opinions of probable cost prepared by him.

Appendix P

Widefield Water and Sanitation District 2019 Water and Wastewater Report

WIDEFIELD WATER AND SANITATION DISTRICT

8945 Fontaine Blvd.
Colorado Springs, CO 80925

District Water and Wastewater Report
Annual Update

Date of Update January 1, 2020

Update Author Robert K. Bannister, P.E.
District Engineer
Widefield Water and Sanitation District

Attachments

- Widefield Water Facilities Map
- Widefield 2019 Water Quality Consumer Confidence Report
- End of 2019 Year Commitment Balance Sheet

WATER REPORT UPDATE

1. Water General

The Widefield Water and Sanitation District's (the District) Water System was originally created in the 1960's and has been expanded for nearly 60 years. The system serves approximately 9350 single family equivalent households.

All water supply is based on surface water rights, renewable groundwater, and a mix of various sources. The system does not rely on any non-renewable water sources.

The current Legal Water Supply Holding of the District are estimated at 7,900 annual acre-feet.

The current Developed Physical Supply is 5271 annual acre-feet. The three-year running average actual use is 2615 acre-feet which is roughly 48% of the existing available physical supply.

A revised table of active commitments, and completed subdivisions is attached. This table is valid as of January 1, 2019.

2. Recent Water Volumes Used

The recent three-year water use and tap data are as follows:

Year	Annual Use (Acre-Feet)	Single Family Equivalent (Taps in SFE)
2017	2612	8521
2018	2702	8927
2019	2531	9350

3. Water Supply

Changes in Water Supply: In 2019, the District placed the Fontaine Water Treatment Facility online. This plant uses ion exchange to remove PFOS and PFOA from the District's water supply. This plant added an additional 500 gpm of treated water to the system.

The District added an additional raw water pipeline to include additional wells in the Widefield Aquifer to the Southmoor Water Treatment Facility. This increased the production in the facility to maximum capacity of 2,200 gpm and allowed for five wells to be treated by the facility, up from three wells previously.

The District hired consultants to design a new Booster 2 Pump Station to provide additional pumping for the West to East Project. This pump station is expected to be constructed in 2021.

The District hired consultants to design a new Zone 6 Storage Tank known as the Rolling Hills Tank. Design is in its infancy and size has not been determined by the end of 2019. Construction is expected in 2020 and 2021.

Listing of Water Supplies:

Renewable Groundwater – All sources previously documented at County Attorney's Office.

- Widefield Aquifer – The District is allocated the use of 2,650 annual acre-feet through the Widefield Aquifer Stipulation.
- Jimmy Camp Aquifer – The District is allocated 650 annual acre-feet through the Widefield Aquifer Stipulation.
- Vennetucci Lease – The District is perpetually leased an allocation of 596 annual acre-feet through a Public Trust Partnership which provides for funding of the Vennetucci Trust farm through water revenues on a perpetual basis. The Vennetucci Lease has become contaminated and the District has suspended the lease until treatment has been established. This is expected in 2021.

Surface Water Supplies – Sources documented at County Attorney's Office.

- The District owns 1,500 annual acre-feet of the Fountain Valley Authority Project which safely yields 1,425 annual acre-feet of fully consumable water.

- The District has 812 shares of Fountain Mutual Irrigation Water and is the owner/operator of the Crews Gulch Augmentation Station as this supply is used in augmentation or leased out on an annual basis, as it has never been fully needed.
- The District owns roughly 1,931 annual acre-feet of return flows from CSU's portion of the FVA project. This is used in augmentation.
- The District owns a mix of senior surface water supplies and out-of-priority water supplies that total 1,274 annual acre-feet. This is the fully consumable water right for future growth that is currently leased to a third party.

Potential or Intended Future Supplies

Although the District does have active cases that are intended to extend supplies, the District does not wish to disclose the volumes or nature of those supplies that are in active acquisition states.

Legal Documentation Accompanying New Water Acquisitions and Augmentations Plans

None.

4. The District's Water Quality

The water quality provided by the District meets or exceeds all required State and Federal Drinking Water Standards. For detailed water quality report, please see the Widefield Consumer Confidence Report which is updated annually and accessible at https://www.wwsdonline.com/media/WWSD.2018CCR.2019.pdf. A copy is attached.

5. The District's Physical Water System

The District's system is too large to show all lines and facilities, the attached Facilities Map shows the major facilities. The District's System consists of:

Service area of roughly 16.2 square miles.

Over 665,000 lineal feet of water mains varying in size from 4 to 30-inches in diameter.

Six water tanks totaling approximately 9.8 million gallons of storage.

Six Pressure Zones.

Four booster stations.

24-inch transmission main from Fountain Valley Authority.

Participation in Pueblo Reservoir and Frying Pan Arkansas Water project.

Two Ion Exchange Water Treatment Plant, one includes an Air Stripper Water Treatment Plant.

Eleven active wells (not including inactive wells or Venetucci wells).

6. Major Capital Improvement Projects Accomplished During Recent Years and Anticipated Improvements for the Upcoming Years

Most Recent Three Years – Upgrades to water facilities include the following:

- Continuation of the West to East Transmission line. This project includes certain transmission line upgrades which will continue over the next 10 years.
- Construction of an Ion Exchange plant to remove PFC's from the District's drinking water.
- Construction of the Veterans Affairs Pikes Peak National Cemetery Water Delivery System.
- Development of Zone 6 in the northeast section of the District.
- Well Manifold to bring additional wells to the Ion Exchange water treatment facility.

Expected Upcoming Three-Year Improvements – These are all system-wide capital projects.

- Additional construction of the West to East Transmission line.
- Upgrade of the Booster #2 Pump Station.
- Refurbishment of the existing air stripper facility to ion exchange technology.
- Construction of new Zone 6 tank (Developer funded).
- Construction of new Zone 7a Booster Station (Developer funded).

WASTEWATER REPORT UPDATE

1. Wastewater General

The Widefield Water and Sanitation District's (the District) Wastewater System was originally created in the 1960's and has been expanded for nearly 60 years. The system serves over 8737 single family equivalent households.

The current hydraulic capacity of the Widefield Wastewater Treatment Plant is 2.14 MGD. *Note – WWTO are rated on the basis of Average Daily Maximum Monthly Flow, which differs from Max Day Flow.* There has been no increase to plant capacity since 2001, however, the plant was rerated in 2016 to 2.14 MGD due to lack of air processing capabilities.

The treatment plant discharges to the Lower Fountain Creek.

Current 3 year running average loading is 1.67 MGD which is roughly 78% of Plant Capacity.

Current projected use plus active commitments are projected to be roughly 1.72 MG which represents approximately 69% of Current Hydraulic Plant Capacity. *Note – wastewater treatment plants are rated on the basis of Average Daily Maximum Monthly Flow, which differs from Max Day Flow.*

2. Actual Wastewater Volumes Treated

The three most recent years of wastewater plant loads and tap data are as follows:

Year	Average Daily Flow (MGD)	Single Family Equivalent (Taps in SFE)
2017	1.75	8326
2018	1.71	8737
2019	1.56	9253

3. Existing Widefield Wastewater System

The District's Wastewater System consist of:

Service area of roughly 14.3 square miles.

Over 530,000 lineal feet of pipeline varying in size from 4 to 24-inches in diameter.

Over 23,00 lineal feet of pressure pipeline varying in size from 4 to 12-inches in diameter.

Five lift stations.

Wastewater Treatment Plant – 2.14 MGD capacity.

The existing wastewater plant remains in compliance with CDPHE Discharge Standards.

4. Major Capital Improvements Accomplished during the Past Year and Anticipated Improvements for the Upcoming Years

Most Recent Three Years – Upgrades to wastewater facilities include the following:

- Some replacement of older lines in older areas of the District.
- Installed 3rd pump at the Jimmy Camp Lift Station.
- Continued construction of East Jimmy Camp Interceptor along the East Jimmy Camp Creek (Developer funded).
- Upgrade of treatment system to meet Regulation 85 requirements. This upgrade includes Bio-nutrient Removal. This is not expected to increase capacity.
- Upgrade of solids handling to perform dewatering of sludge.
-

Expected Upcoming Three-Year Improvements – These are all system wide capital projects:

- Continued replacement of older lines or relining of existing pipe.
- Upgrade air handling equipment.
- Upgrade step screen.

N
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S
W

SCALE
1 inch = 1,200 feet
0
1,200

WATER
BOUNDRY
PARCELS
PZ RAW WATER
PZ1
PZ2
PZ3
PZ4
PZ5
PZ6
Water Network Structure

Well W1
Well W2
Well W4
Well C3b
Well W3
Well C3
Well C4
Well W7
Well E2
Well C2
Southmoor WTP
FONTAINE WTP
Booster 2 Pump Station
Booster 2 0.75 MG Tank
0.75 MG Elevated Tank
2 MG Tank
4 MG Tank
Well HW2
Well HW4
Well HW5
VA Pump Station
0.3 MG EQ Tank
Rolling Hills Booster Pump Station

Project No:
Scale: AS SHOWN
Date:03/19/2020
Design By: RKB
Drawn By: RKB
Reviewed By: RKB
Revised:

WIDEFIELD WATER AND SANITATION DISTRICT
WATER SYSTEM MAP 2020

Widefield
Water and Sanitation District

WIDEFIELD WSD 2019 Drinking Water Quality Report
For Calendar Year 2018

Public Water System ID: CO0121900

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact BRANDON BERNARD at 719-464-2051 with any questions or for public participation opportunities that may affect water quality.

General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit www.colorado.gov/cdphe/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using 121900, WIDEFIELD WSD, or by contacting BRANDON BERNARD at 719-464-2051. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
WELL W4 (Groundwater-Well) WELL W2Groundwater-Well) WELL W3 (Groundwater-Well) WELL C1 (Groundwater-Well) WELL W7 (Groundwater-Well) WELL E2 (Groundwater-Well) WELL C3 (Groundwater-Well) WELL C36 (Groundwater-Well) JHW2 WELL REDRILL (Groundwater-Well) JHW5R WELL (Groundwater-Well) JHW4R WELL (Groundwater-Well) WELL C2 REDRILL (Groundwater-Well) PURCHASED FROM CO0121275 (Groundwater-Consecutive Connection) WELL W1 (Groundwater-Well) PURCHASED FROM CO0121775 (Surface Water-Consecutive Connection) PURCHASED FROM CO0121300 (Surface Water-Consecutive Connection)	Environment, Industry, Soil runoff, and erosion of natural deposits

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** − The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** − A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** − A violation of either a MCL or TT.
- **Non-Health-Based** − A violation that is not a MCL or TT.
- **Action Level (AL)** − The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** − The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** − The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** − The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** − Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** − Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** − Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** − Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** − Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** − Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** − Typical value.
- **Range (R)** − Lowest value to the highest value.
- **Sample Size (n)** − Number or count of values (i.e. number of water samples collected).

- **Parts per million = Milligrams per liter (ppm = mg/L)** − One part per million corresponds to one minute in two years or a single penny in $10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** − One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Detected Contaminants

WIDEFIELD WSD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2018 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Disinfectants Sampled in the Distribution System
TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm ***OR***
If sample size is less than 40 no more than 1 sample is below 0.2 ppm
Typical Sources: Water additive used to control microbes

Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	March, 2018	Lowest period percentage of samples meeting TT requirement: 95%	1	20	No	4.0 ppm

Assessments for Microorganism Contaminants Sampled in the Distribution System

Contaminant Name	TT Requirement	TT Violation
Total Coliform	We were required to conduct an assessment of our system due to one of the following: More than 5.0% positive samples per period (If sample size is greater than or equal to 40) ***OR*** More than 1 positive sample per period (If sample size is less than 40) ***OR*** Repeat samples not collected after positive sample.	No

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct ZERO Level 1 assessment(s)!

Lead and Copper Sampled in the Distribution System								
Contaminant Name	**Time Period**	**90th Percentile**	**Sample Size**	**Unit of Measure**	**90th Percentile AL**	**Sample Sites Above AL**	**90th Percentile AL Exceedance**	**Typical Sources**
Copper	02/22/2018 to 03/14/2018	0.38	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/31/2018 to 12/12/2018	2.8	60	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	07/31/2018 to 12/12/2018	0.33	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	02/22/2018 to 03/14/2018	2.6	60	ppb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System									
Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Total Haloacetic Acids (HAA5)	2018	12.3	1.41 to 30	16	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2018	28.62	4.1 to 59.71	16	ppb	80	N/A	No	Byproduct of drinking water disinfection

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Gross Alpha	2017	1.68	0.71 to 2.65	2	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2017	1.5	1.5 to 1.5	1	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2017	6.83	6.1 to 8.2	3	ppb	30	0	No	Erosion of natural deposits
Gross Beta Particle Activity	2017	2	2 to 2	1	pCi/L*	50	0	No	Decay of natural and man-made deposits

*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern for Gross Beta Particle Activity.

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Barium	2018	0.01	0.01 to 0.01	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2018	0.89	0.89 to 0.89	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2018	4.39	0.85 to 6.9	7	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Nitrate: *Nitrate in drinking water at levels above 10 ppm* is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Volatile Organic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Tetrachloroethylene	2018	0.13	0 to 0.63	5	ppb	5	0	No	Discharge from factories and dry cleaners

Secondary Contaminants**

**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2018	180	180 to 180	2	ppm	N/A
Total Dissolved Solids	2014	1105	1100 to 1110	2	ppm	500

Unregulated Contaminants***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Bromochloroacetic Acid	2018	2.41	0.909-4.53	8	Parts per Billion
Chlorodibromoacetic Acid	2018	0.90	0.379-1.58	8	Parts per Billion
Dibromoacetic Acid	2018	1.92	1.14-2.91	8	Parts per Billion
Bromodichloroacetic Acid	2018	1.43	0-3.7	8	Parts per Billion
Dichloroacetic Acid	2018	4.24	0-10.8	8	Parts per Billion
Monobromoacetic Acid	2018	0.25	0-0.83	8	Parts per Billion
Trichloroacetic Acid	2018	2.88	0-7.14	8	Parts per Billion
Manganese	2018	4.8	0.412-9.35	2	Part per Billion
Perfluorobutanesulfonic acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion
Perfluorheptanoic acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion

Unregulated Contaminants***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Perfluorohexanesulfonic Acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion
Perfluorooctanesulfonic Acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion
Perfluorooctanoic Acid	2018	Non-Detect	Non-Detect	12	Parts per Trillion

***More information about the contaminants that were included in UCMR monitoring can be found at: https://drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR. Learn more about the EPA UCMR at: http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/contact.cfm.

Violations, Significant Deficiencies, Backflow/Cross-Connection, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions

CITY OF FOUNTAIN - 2018 MONITORING RESULTS

The table below displays the levels of contaminants detected from water samples taken throughout the 2018 calendar year from the City of Fountain. This table also reflects Fountain Valley (FVA) Authority's (PWSID #CO0121300) test results for 2018 as the City of Fountain purchases 99% of it's drinking water from FVA. If you have any questions regarding the FVA's results, please contact them directly. The City of Fountain joined with Security Water District and Widefield Water & Sanitation District on a water exchange joint project; therefore, Security and Widefield's CCR information has also been included. If you would like a complete copy of their CCR, you are welcome to contact them directly. If you would like to view all test results for the City of Fountain's Water Department, they are available at 301 E. Iowa Avenue, Fountain, CO during normal business hours. NOTE: Only detected contaminants sampled within the last five years appear in this report. If no tables appear in this section, that means the City of Fountain did not detect any contaminants in the last round of monitoring.

INORGANIC CONTAMINATES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	LEVEL DETECTED	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
ARSENIC	ppb	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 - 1	1	1	2016	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste.
BARIUM	ppm	2	2	.04 - .05	0.04	2	2017	0.01 - 0.01	0.01	2	2018	0.06	N/A	N/A	2018	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
CHROMIUM	ppb	100	100	N/A	N/A	N/A	N/A	0 - 1	0.25	4	2017	N/A	N/A	N/A	N/A	Discharge from steel and pulp mills; erosion of natural deposits.
FLOURIDE	ppm	4	4	1.7 - 1.8	1.75	2	2017	0.89 - 0.89	0.89	1	2018	0.53	N/A	N/A	2018	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
NICKEL	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.53	N/A	N/A	2018	Erosion of natural deposits; discharge from industries; discharge from refineries and steel mills.
NITRATE	ppm	10	10	1.6 - 3	2.3	2	2018	0.85 - 6.9	4.39	7	2018	0.44	N/A	N/A	2018	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
SELENIUM	ppb	50	50	4 - 7.4	5.7	2	2017	N/A	N/A	N/A	N/A	6	N/A	N/A	2018	Discharge from pertroleum and metal refineries; erosion of natural deposits; discharge from mines.
TETRACHLOROETHYLENE	ppb	0	5	N/A	N/A	N/A	N/A	0 - 0.63	0.13	5	2018	N/A	N/A	N/A	N/A	Discharge from factories and dry cleaners.
TRICHLOROETHYLENE	ppb	0	5	N/A	N/A	N/A	N/A	0 - 1	0.17	6	2017	N/A	N/A	N/A	N/A	Discharge from metal degreasing sites and other factories.

SECONDARY CONTAMINATES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
SODIUM	ppm	N/A	N/A	120 - 140	130	2	2017	180 - 180	180	2	2018	19.6	N/A	N/A	2018	Erosion of natural deposits
TOTAL DISSOLVED SOLIDS	ppm	N/A	N/A	N/A	N/A	N/A	N/A	1100 - 1110	1105	2	2014	N/A	N/A	N/A	N/A	Secondary Standard: 500
DIBROMOACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	1.14 - 2.91	1.92	8	2018	N/A	N/A	N/A	N/A	N/A
DICHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	0 - 10.8	4.24	8	2018	N/A	N/A	N/A	N/A	N/A
TIRCHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	0 - 7.14	2.88	8	2018	N/A	N/A	N/A	N/A	N/A

ORGANIC CONTAMINANTS	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
HEXACHLOROCYCLO-PENTADIENE	ppb	50	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0 - .06	0.03	2	2016	N/A

DISINFECTANTS SAMPLED IN THE DISTRIBUTION SYSTEM

DISINFECTANT	UNIT	Lowest period percentage of samples meeting TT requirements: 100%	FOUNTAIN WATER			WIDEFIELD WATER			FOUNTAIN VALLEY AUTHORITY		TYPICAL SOURCES
CHLORINE	ppm		Number of Samples Below Level: 0	30	2018	Number of Samples Below Level: 1	20	2018	TT= No More Than 4 Hours With Sample Below 0.2 MG/L	2018	**Disinfectants Sampled in the Distribution System** - TT Requirements: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR if sample size is less than 40 no more than 1 sample is below 0.2 ppm. **Typical Sources:** Water additive used to control microbes.

LEAD & COPPER (Sampled in the distribution System)	UNIT	90th PERCENTILE AL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
			90th PERCENTILE	SITES ABOVE AL	SAMPLE SIZE	DATES	90th PERCENTILE	SITES ABOVE AL	SAMPLE SIZE	DATES	90th PERCENTILE	SITES ABOVE AL	SAMPLE SIZE	DATES	
COPPER	ppm	1.3	0.38	0	60	11/8/18 - 11/16/18	0.33 - 0.38	0	60	2/22/18 - 12/12/18	N/A	N/A	N/A	N/A	Corrosion of household plumbing systems; erosion of natural deposits.
LEAD	ppb	15	6.3	2	60	11/8/18 - 11/16/18	2.6 - 2.8	1	60	2/22/18 - 12/12/18	N/A	N/A	N/A	N/A	Corrosion of household plumbing systems; erosion of natural deposits.

(DISINFECTION BYPRODUCTS PRECURSOR) REMOVAL RATIO OF RAW AND FINISHED WATER - FOUNTAIN VALLEY AUTHORITY									
TOTAL ORGANIC CARBON	UNIT	MCLG	MCL	SAMPLE DATES	AVERAGE	RANGE	MCL VIOLATION		TYPICAL SOURCES
	RATIO	N/A	TT MIN. RATIO: 1.00	MONTHLY - Running Annual Average (2017)	1.08	1 - 1.28	NO		Naturally present in the environment

FOUNTAIN VALLEY AUTHORITY (FVA) MICROBIOLOGICAL CONTAMINANTS								
CONTAMINANT	UNIT	AVERAGE	SAMPLE SIZE	DATE		LEVEL DETECTED	VIOLATION	TYPICAL SOURCES
TURBIDITY	NTU	---	---	Sept. 2018		Highest Single Measurement: 0.128 NTU	NO	Soil Runoff
TURBIDITY	NTU	---	---	Dec. 2018		Lowest monthly percentage of samples meeting TT requirements: 100%	NO	Soil Runoff

FOUNTAIN VALLEY AUTHORITY (FVA) CRYPTOSPORIDIUM AND RAW SOURCE WATER E. COLI						
CONTAMINANT	UNIT	MCL	RANGE DETECTED	YEAR	DESCRIPTION	TYPICAL SOURCES
CRYPTOSPORIDIUM	oocysts	0	0	2018	Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organinsms are dead or if they are capeable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdpminal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-comprimised people are at greater risk of developing life threatening illness. We encourage immuno-comprimised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.	Naturally present in the environment
E. COLI	MPN	N/A	0 - 10	2018		Naturally present in the environment

DISINFECTION BY-PRODUCTS	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
TOTAL HALOCETIC ACIDS (HAA5)	ppb	N/A	60	9.2 - 27	19.2	16	2018	1.41 - 30	12.3	16	2018	N/A	N/A	N/A	N/A	By-product of drinking water disinfection.
TOTAL TRIHALOMETHANES (TTHM)	ppb	N/A	80	25.5 - 53.8	40.68	16	2018	4.1 - 59.71	28.62	16	2018	N/A	N/A	N/A	N/A	By-product of drinking water disinfection.

RADIONUCLIDES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEAR SAMPLED	
GROSS ALPHA	pCi/L	0	15	4.2 - 4.2	4.2	1	2017	0.71 - 2.65	1.68	2	2017	N/A	N/A	N/A	N/A	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY	pCi/L	0	50	N/A	N/A	N/A	N/A	2 - 2	2	1	2017	N/A	N/A	N/A	N/A	Decay of natural and man-made deposits
RADIUM, COMBINED (226, 228)	pCi/L	0	5	1.34 - 1.34	1.34	1	2017	1.5 - 1.5	1.5	1	2017	N/A	N/A	N/A	N/A	Erosion of natural deposits
URANIUM - COMBINED	ppb	0	30	7.2 - 7.2	7.2	1	2017	6.1 - 8.2	6.83	3	2017	N/A	N/A	N/A	N/A	Erosion of natural deposits

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Third Unregulated Contaminant Monitoring Rule (UCMR3). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR3 sampling and the corresponding analytical results are provided below.

UNREGULATED CONTAMINATES	UNIT	MCLG	MCL	FOUNTAIN WATER				WIDEFIELD WATER				FOUNTAIN VALLEY AUTHORITY				TYPICAL SOURCES
				RANGE	AVERAGE	SAMPLE SIZE	YEARS SAMPLED	RANGE	AVERAGE	SAMPLE SIZE	YEARS SAMPLED	LEVEL DETECTED	AVERAGE	SAMPLE SIZE	YEARS SAMPLED	
BROMOCHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	.909 - 4.53	2.41	8	2018	N/A	N/A	N/A	N/A	N/A
CHLORODIBROMOACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	.379 - 1.58	0.90	8	2018	N/A	N/A	N/A	N/A	N/A
CHROMIUM	ppb	N/A	N/A	0 - .9	0.19	49	2014-2015	.2 - 1.1	0.19	49	2014-2015	N/A	N/A	N/A	N/A	N/A
BROMODICHLOROACETIC ACID	ppb	N/A	N/A	N/A	N/A	N/A	N/A	0 - 3.7	1.43	8	2018	N/A	N/A	N/A	N/A	N/A
COBALT	ppb	N/A	N/A	0 - 1.35	0.03	48	2014-2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MANGANESE	ppb	N/A	N/A	N/A	N/A	N/A	N/A	.412 - 9.35	4.8	2	2018	N/A	N/A	N/A	N/A	N/A
MONOBROMOACETIC ACID	PPB	N/A	N/A	N/A	N/A	N/A	N/A	0 - 0.83	0.25	8	2018	N/A	N/A	N/A	N/A	N/A
MOLYBDENUM	ppb	N/A	N/A	0 - 7.07	3.5	49	2014-2015	1.3 - 6.	3.5	49	2014-2015	N/A	N/A	N/A	N/A	N/A
CHROMIUM	ppb	N/A	N/A	0 - .9	0.19	49	2014-2015	.2 - 1.1	0.19	49	2014-2015	N/A	N/A	N/A	N/A	N/A
STRONTIUM	ppb	N/A	N/A	460 - 640	447	49	2014-2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VANADIUM	ppb	N/A	N/A	0 - .05	0.45	49	2014-2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CHROMIUM, HEXAVALENT (DISSOLVED)	ppb	N/A	N/A	0 - .05	0.14	53	2014-2015	.032 - .62	0.14	53	2014-2015	N/A	N/A	N/A	N/A	N/A
CHLORATE	ppb	N/A	N/A	N/A	45	49	2014-2015	25 - 390	45	49	2014-2015	N/A	N/A	N/A	N/A	N/A
1,4-DIOXANE	ppb	N/A	N/A	0 - .19	0.059	17	2014-2015	.07 - .13	0.059	17	2014-2015	N/A	N/A	N/A	N/A	N/A
PERFLUOROBUTANESULFONIC ACID (PFBS)	ppb	N/A	N/A	N/A	N/A	N/A	N/A	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROHEPTANOIC ACID (PFHpA)	ppb	N/A	N/A	0 - .01	0.0096	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROHEXANESULFONIC ACID (PFHxS)	ppb	N/A	N/A	0 - .06	0.098	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROOCTANESULFONIC ACID (PFOS)	ppb	N/A	N/A	0 - .04	0.033	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A
PERFLUOROOCTANOIC ACID (PFOA)	ppb	N/A	N/A	.02 - .04	0.017	18	2014-2015	Non-Detect	Non-Detect	12	2018	N/A	N/A	N/A	N/A	N/A

***More information about the contaminants that were included in UCMR3 monitoring can be found at: http://www.drinktap.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule.aspx. Learn more about the EPA UCMR at: http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/contact.cfm

VIOLATIONS, SIGNIFICANT DEFICIENCIES, BACKFLOW/CROSS-CONNECTION, AND FORMAL ENFORCEMENT ACTION - THE STATE OF COLORADO REQUIRES ALL WATER DISTRIBUTORS TO LIST ANY DETECTED CONTAMINANTS THAT APPEAR; REASON OF DETECTED CONTAMINANTS; AND CORRECTIVE MEASURES TAKEN TO PREVENT FROM REOCCURRING. THE FOLLOWING WATER PROVIDERS WERE GIVEN NOTIFICATION OF THE STATE'S FINDINGS REGARDING ANY AND ALL VIOLATIONS, IF ANY, WITH THE RESULTS LISTED BELOW:

NAME	CATEGORY	TIME PERIOD	HEALTH EFFECTS	CORRECTIVE MEASURES
Cross Connection Rule	Failure to meet Cross Connection/Backflow Requirements - Health-based	11/14/18 - Open	May pose risk to public health	State drinking water regulations require that all public drinking water systems, such as FVA, test a percentage of the backflow prevention devices located within their systems annually. In March of 2018, FVA identified 6 backflow prevention devices within its water system that were not tested as required in 2017. This means that FVA violated State drinking water regulations by failing to ensure that these 6 backflow prevention devices were tested in 2017. All 6 of the backflow prevention devices were tested on March 8, 2018 and passed the tests. Therefore, FVA is not aware of any uncontrolled cross connections to its water supply system. FVA is providing the state with an updated Backflow Prevention Cross-Connection Program Plan that includes measures to avoid this type of violation in the future.

Fountain Valley Authority (PWSID # CO0121300)
2019 Water Quality Report Information for the 2018 Calendar Year for:
City of Fountain (PWSID # CO0121275)
Colorado Springs Utilities (PWSID # CO0121150)
Security Water District (PWSID # CO0121775)
Stratmoor Hills Water District (PWSID # CO0121800)
Widefield Water District (PWSID # CO0121900)

WATER SOURCE INFORMATION

Fountain Valley Authority treats surface water received from the Fryingpan-Arkansas Project. The Fryingpan-Arkansas Project is a system of pipes and tunnels that collects water in the Hunter-Fryingpan Wilderness Area near Aspen. Waters collected from the system are diverted to the Arkansas River, near Buena Vista, and then flows approximately 150 miles downstream to Pueblo Reservoir. From Pueblo Reservoir, the water travels through a pipeline to the water treatment plant.

COLORADO SOURCE WATER ASSESSMENT AND PROTECTION

The Colorado Department of Public Health and Environment may has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit www.colorado.gov/cdphe/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using 121300, FOUNTAIN VALLEY AUTHORITY or by contacting Colorado Springs Utilities Laboratory Services at 719-668-4560. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed below.

Potential sources of contamination to our source water areas may come from:

- EPA Superfund Sites
- EPA Abandoned Contaminated Sites
- EPA Hazardous Waste Generators
- EPA Chemical Inventory/Storage Sites
- EPA Toxic Release Inventory Sites

- Permitted Wastewater Discharge Sites
- Aboveground, Underground and Leaking Storage Tank Sites
- Solid Waste Sites
- Existing/Abandoned Mine Sites
- Concentrated Animal Feeding Operations
- Other Facilities
- Commercial/Industrial Transportation
- High-and-Low-Intensity Residential
- Urban Recreational Grasses
- Quarries/Strip Mines/Gravel Pits
- Agricultural Land (row crops, small grain, pasture/hay, orchards/vineyards, fallow and other)
- Forest
- Septic Systems
- Oil/Gas Wells
- Road Miles

Fountain Valley Authority is dedicated to protecting our source water and ensuring quality treated water is delivered to our customers. The results of the source water assessment are not a reflection of our treated water quality received at the system connections, but rather a rating of the susceptibility of contamination under the guidelines of the Colorado SWAP program.

POSSIBLE WATER CONTAMINANTS

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants: viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants: salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides: may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Radioactive contaminants: can be naturally occurring or be the result of oil and gas production and mining activities.

- Organic chemical contaminants: including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

FLUORIDE INFORMATION

Fluoride is a compound found naturally in many places, including soil, food, plants, animals and the human body. It is also found naturally in Fountain Valley Authority's water source. Fountain Valley Authority does not add additional fluoride to the treated water. Any fluoride in the treated water results from what occurs naturally in the source water.

LEAD INFORMATION

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

DEFINITIONS

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.

- **Compliance Value (No Abbreviation) –** Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** − Typical value.
- **Range (R)** − Lowest value to the highest value.
- **Sample Size (n)** − Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** − One part per million corresponds to one minute in two years or a single penny in $10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** − One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- **Not Applicable (N/A) –** Does not apply or not available.
- **Level 1 Assessment –** A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment –** A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

WANT MORE INFORMATION

For questions concerning this report, please call Colorado Springs Utilities Laboratory Services at (719) 668-4560.

TABLE OF DETECTED CONTAMINANTS

Fountain Valley Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2018 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

Detected Contaminants Table

Fountain Valley Authority (PWSID CO0121300)

Inorganic Contaminants

Monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	MCL	MCLG	Units	Level Detected	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Barium	2	2	ppm	0.06	No	April 2018	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	4	4	ppm	0.53	No	April 2018	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	10	10	ppm	0.44	No	April 2018	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel	N/A	N/A	ppb	0.53	N/A	April 2018	Erosion of natural deposits, discharge from industries, discharge from refineries and steel mills
Selenium	50	50	ppb	6	No	April 2018	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N/A	N/A	ppm	19.6	N/A	April 2018	Erosion of natural deposits

Organic Contaminants

Monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	MCL	MCLG	Units	Average	Range	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Hexachlorocyclopentadiene	50	50	ppb	0.03	0 - 0.06	No	April, July 2016	Discharge from chemical factories

Turbidity

Continuously monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	TT Requirement	Level Detected	TT Violation	Sample Dates	Possible Source(s) of Contamination
Turbidity	Maximum 1 NTU for any single measurement	Highest Single Measurement: 0.128 NTU	No	Sept 2018	Soil Runoff
Turbidity	In any month, at least 95% of samples must be less than 0.3NTU	Lowest Monthly percentage of samples meeting TT requirement: 100%	No	Dec 2018	Soil Runoff

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio and Finished Water

Monitored at the Treatment Plant (entry point to transmission system)

Contaminant	MCL	MCLG	Units	Average	Range Low - High	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Total Organic Carbon (TOC)	TT minimum ratio = 1.00	N/A	N/A	1.08	1 – 1.28	No	Monthly - Running Annual Average	Naturally present in the environment

Disinfectants

Continuously monitored at the Treatment Plant (entry point to the transmission system)

Contaminant	MRDL	Units	Level Detected	MRDL Violation	Sample Dates	Possible Source(s) of Contamination
Chlorine	TT= No more than 4 hours with a sample below 0.2 ppm	ppm	0 samples above or below the level	No	Jan – Dec 2018	Water additive used to control microbes

Violations, Significant, Backflow/Cross Connection, and Formal Enforcement Actions

Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
Cross Connection Rule	Failure to meet Cross Connection/Backflow Requirements – Health-based	11/14/18 - Open	May pose a risk to public health	N/A	N/A

Additional Violation Information

State drinking water regulations require that all public drinking water systems, such as FVA, test a percentage of the backflow prevention devices located within their systems annually. In March of 2018, FVA identified 6 backflow prevention devices within its water system that were not tested as required in 2017. This means that FVA violated State drinking water regulations by failing to ensure that these 6 backflow prevention devices were tested in 2017. All 6 of the backflow prevention devices were tested on March 8, 2018 and passed the tests. Therefore, FVA is not aware of any uncontrolled cross connections to its water supply system. FVA is providing the state with an updated Backflow Prevention Cross-Connection Program Plan that includes measures to avoid this type of violation in the future.