

**APPLICATION AND PETITION FOR DISCONNECTION OF
REAL PROPERTY FROM THE CITY OF FOUNTAIN, COLORADO**

(PORTIONS OF SECTIONS 1, 2, 3, 10 AND 11, TOWNSHIP 16 SOUTH, RANGE 65 WEST
OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO, AND A PORTION OF
SECTION 6, TOWNSHIP 16 SOUTH, RANGE 64 WEST OF THE 6TH P.M.,
COUNTY OF EL PASO, STATE OF COLORADO)

November 4, 2021

City Council Members City of Fountain 116 South Main Street Fountain, CO 80817	Scott Trainor Fountain City Manager 116 South Main Street Fountain, CO 80817	Troy Johnson, Esq. Fountain City Attorney 116 South Main Street Fountain, CO 80817
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THE CORUNDUM GROUP V LLC, a Colorado limited liability company (“Applicant”), as owner of the approximately 2,400 acre parcel of real property legally described and depicted in the attached **Exhibit A** (the “Kane Ranch Property”), pursuant to the provisions of Section 31-12-501, *et seq.*, Colorado Revised Statutes (C.R.S.), hereby submits this Application to the City Council (the “Council”) for the City of Fountain (the “City”), in its capacity as the governing body of the City, requesting that the Council enact an ordinance substantially in the form attached as **Exhibit B**, disconnecting and de-annexing the Kane Ranch Property from the City and thereby making the Kane Ranch Property a part of unincorporated El Paso County, Colorado. Pursuant to the requirements of Section 31-12-501(1) Colorado Revised Statutes (C.R.S.), notice and a copy of this Application has been delivered to the Board of County Commissioners for El Paso County, Colorado, and to the Board of Directors for the Special Districts identified on **Exhibit C**. Applicant is joined in this Application by **SILVER CROSS DEVELOPMENT, INC., a Colorado corporation** (“Silver Cross”) which holds contractual option rights to acquire the Kane Ranch Property for development and sale, all pursuant to a “Real Property Purchase Option Agreement” dated September 21, 2020, which is further disclosed by a “Memorandum Of Real Property Purchase Option Agreement” dated September 21, 2020 and recorded in the real property records of El Paso County, Colorado on December 2, 2020 at Reception No. 220196032.

In addition to the Kane Ranch Property, Applicant, Silver Cross and an affiliate of Silver Cross known as **LA PLATA CRUZ HOLDINGS, LLC, a Colorado limited liability company** (“Holdings”) are pursuing entitlement and development of an approximately 3,200 acre parcel of real property located adjacent to and north of the Kane Ranch Property, currently in unincorporated El Paso County, Colorado, which property is commonly referred to as the “Tee Cross Property.” The parties had planned to develop the Tee Cross Property and the Kane Ranch Property as a single cohesive development to be known as “Amara,” which development would comprise approximately 5,600 acres in total. In furtherance of those intentions, Holdings had been in negotiations with City officials to complete the annexation of an initial portion of the Tee Cross Property into the boundaries of the City.

Further annexations for the remainder of the Tee Cross Property were also planned as the Amara development progressed.

Following significant effort and at great expense incurred in pursuit of this initial annexation into the City, officials of the City disclosed to Holdings, for the first time and in contradiction of previous statements and assurances given to Holdings, that the City had insufficient water treatment, delivery and storage infrastructure and water resources to accommodate development of even the properties which have already been annexed into the City, including the Kane Ranch Property, let alone development of the portion of the Tee Cross Property proposed for annexation. In fact, the City clarified that it is currently unable to provide water service to annexed properties already under consideration for development by the City Planning Staff, such as the Almagre project, and further disclosed that any proposed development of the Kane Ranch Property, which is also already annexed into the City, would be impossible in the near future. As a result, Holdings discontinued its efforts to annex the subject portion of the Tee Cross Property into the City. Further, Silver Cross's and Holdings' plans for development of any portion of the Amara project, including any portion of the Kane Ranch Property already annexed into the City, and certainly their plan for a cohesive development of the Amara project within the City, have been quashed for the foreseeable future.

Applicant, Silver Cross and Holdings are currently in the process of marketing portions of the Amara project for development and sale, which efforts have included numerous meetings, on-site property tours, and planning and design efforts with a variety of prominent residential and commercial developers interested in acquiring and developing portions of the Amara project. These marketing, planning, and designing efforts were poised in the very near future to culminate in the submission of numerous requests for the City's approval of various entitlements and development approvals for the Amara project. However, as the Council is aware, the City has now recently confirmed in public statements that the City's water treatment, delivery and storage infrastructure and water resources necessary for the provision of potable water services to both existing and future developments within the City of Fountain are severely limited, extremely overtaxed and simply incapable of accommodating any reasonable amount of anticipated growth for the City. Thus, for the foreseeable future, new development applications have no reasonable chance of being approved.

In a recent public news article, City Utilities Director, Mr. Dan Blankenship, stated that the City has received up to 30 development proposals seeking 30,000 additional taps, which would more than quadruple the City's current inventory of 8,700 existing taps. In fact, Mr. Blankenship stated that even a small fraction of these proposed additional taps would virtually exhaust the City's existing water treatment, delivery and storage infrastructure and water resource capabilities. While the City apparently continues to accept development applications, the City has made clear in public statements that these applications are being accepted on a first come first served basis, and that the City's remaining available water taps (approximately 500 to 800 sfr water taps) have essentially already been spoken for by

development submittals currently in process. Mr. Blankenship has also publicly stated that the City's Utilities Department is unable to approve any further development beyond these remaining taps until the City can find a way to increase its water treatment, delivery and storage infrastructure and water resources. Moreover, the only current and definitive plan for increasing the City's water delivery capacity involves a 2-year project to supplement the City's existing delivery systems, which the City concedes will only provide capacity for an additional 500 to 700 sfr water taps.

In 2006, the City engaged Black & Veatch to prepare a comprehensive 2006 Water Master Plan for the City, which was released in March of 2007 (the "2007 WMP"). In 2021, the City again engaged Black & Veatch to work with the City's Water and Planning Division Staff to define water demand and prepare an updated comprehensive report on the status of the City's water resources, treatment, storage and distribution facilities, and to develop an updated water master plan for the City going forward. The City released a draft of the "City of Fountain Water Master Plan 2021" on September 28, 2021, and City Council formally approved the draft as Resolution 21-059 at the Tuesday, October 26, 2021 City Council Meeting (the "2021 WMP"). The 2021 WMP describes the City's plan for sustainable management and operation of its municipal water system, including its plan to meet the needs of future customers, and the 2021 WMP estimates that meeting the demand for future development in the City will require an increase in the City's water delivery capacity by fully four (4) times the existing capacity. A review of the 2007 WMP together with several references to the 2007 WMP in the 2021 WMP make it clear that the City has been keenly aware of its inability to meet the projected water demands for the City for a very long time. Indeed, the 2007 WMP recommended at that time that the City aggressively pursue water conservation as part of the means to address the City's projected inability to meet water demands for its customers (which explains why their annual water demand has stayed approximately the same since 2006 despite an increase in population). Now, nearly 15 years after adoption of the 2007 WMP, the City appears to finally recognize the severity of the situation. While the City has expressed a desire to expand and improve its water treatment, delivery and storage infrastructure and water resources, according to information provided by the City's Water and Planning Division Staff at the October 26, 2021 City Council meeting, the measures proposed in the 2021 WMP, which were stated as being subject to change, will not be remotely achievable for at least another five (5) to eight (8) years. Applicant believes this estimate is extremely optimistic and unrealistic, and that the actual time line will be much longer, particularly given that the 2021 WMP estimate is based upon only 150 new housing starts per year. Applicant and Holdings have projected approximately 300 new housing starts per year for the Amara project alone.

Of equal concern with respect to any reasonable prospect of having water resources available for future development within the City is the City's stated intention to have the real estate development industry singularly pay for the development and construction of the necessary water storage, treatment and delivery infrastructure required to accommodate future development. This sentiment is further contemplated by the 2021 WMP and was reiterated to City Council at the October 26, 2021 City Council meeting, and confirmed by at

least one Council person during the discussions before formal adoption of the 2021 WMP. While the real estate development community expects to pay development costs for extending infrastructure, and also expects to pay reasonable water tap fees (which themselves are intended to be a growth impact fee), to suggest that the development industry can or should bear the entire expense of resolving the City's water treatment, delivery and storage infrastructure and water resource crisis is economically unrealistic and at odds with other jurisdictions. The City's water tap fees are already the highest in the market. If those water tap fees are further increased and then compounded with additional costs or fees to cure the City's water delivery issues, from an economic perspective when compared to development costs in other communities or other areas of unincorporated El Paso County, the undeveloped areas within the City will essentially be rendered economically undevelopable.

Simply put, it is wholly unrealistic for the City to expect the development community to pay millions of dollars up front for the construction of critical water infrastructure that the City should have been planning for and addressing over the last 15 years based upon the warnings and proposals in the 2007 WMP. Further, the City's ability to construct the necessary infrastructure itself and thereafter recoup the costs from the developers is unrealistic because the City has no meaningful bonding capacity and cannot finance the requisite construction itself. The overly optimistic and unrealistic estimate of five (5) to (8) years within which to resolve the City's inability to provide water to future developments, combined with the suggestion that the development community be responsible at its expense for resolving the entirety of the City's water crisis, essentially makes the Kane Ranch Property and this portion of the Amara project unmarketable to potential homebuilders and other users. The severity of the City's challenge to secure and deliver water resources to the Kane Ranch Property is further evidenced by the fact that Black & Veatch was asked to conduct certain analysis in the 2021 WMP both with and without the Kane Ranch Property, confirming the difficulties of realistically providing water service to the Kane Ranch Property.

In reviewing these issues, Applicant separately retained Wright Water Engineers ("WWE") to perform an analysis of the City's water situation and the findings and projections in the 2021 WMP, and a copy of WWE's report is attached hereto as **Exhibit D** ("WWE Report"). The WWE Report independently reaches the following conclusions:

- While the City has a variety of water rights within its portfolio to support an increased customer base, the City does not have the requisite water treatment or delivery capacity sufficient to support more than the current maximum daily water demands for the City.
- Additional raw water storage will be required at 1.5 times the existing customer base and additional water rights will be required at 2 times the existing customer base.
- The 2007 WMP projected additional growth within the City and made certain recommendations to the City to accommodate the anticipated growth, but the City has

largely ignored the admonitions and recommendations in the 2007 WMP over the last nearly 15 years, which raises serious concerns as to the City's willingness and ability to follow through on the recommendations in the 2021 WMP for future development.

- Because the 2007 WMP recommendations were essentially not followed, financing, constructing and completing the necessary water treatment, delivery and storage infrastructure necessary to meet the City's project growth over the next five (5) years now proves extremely challenging, as further acknowledged by Black & Veatch in the 2021 WMP.
- The WWE Report further notes that projected demands under the three growth scenarios outlined in the 2021 WMP (existing system demands, planned development without Kane Ranch, and planned development with Kane Ranch) may be subject to additional water reductions from the Fry-Ark Project water, which currently comprises a very significant portion of the City's available water supply.
- Because of the significant challenges facing the City in meeting projected demands for water services in a timely and cost effective manner, further development within the City is currently unrealistic and will remain uncertain for the foreseeable future, all of which, again, essentially renders the Kane Ranch Property undevelopable.

In short, while the 2021 WMP purports to include a plan for increasing the City's water resources and delivery capacity for new developments, practical realities contradict the likelihood of any success for this plan within any reasonable time frame. As was clarified by the City's Water Resource Manager at the October 26, 2021 City Council meeting, the City basically has five possible projects or scenarios for dealing with its water crisis, all of which were admitted to have positive and negative connotations, and none of which would individually resolve all of the City's water issues. In fact, one of the proposed projects on the list involves the Widefield Aquifer Recharge Association which was described in the City Council meeting as having been in process for fully 12 years without completion. Moreover, as previously stated, the City lacks the bonding capacity and the financial wherewithal to implement these proposed projects on its own, and it is again unrealistic to suggest that the development community will somehow fund these projects for the City through developer funding and increased water tap fees, all without destroying the economic viability of the future development within the City. Again, the City already imposes the highest water tap fees in the market compared to other jurisdictions in the area, and raising those water tap fees even further will make undeveloped property within the City simply unmarketable.

Thus, Applicant and Silver Cross find themselves in an extremely dire situation, having ownership of and contract rights to acquire developable property within the City at a time of peak demand and interest from the development community, yet with no reasonable prospect for being able to develop the property in the foreseeable future. Applicant and Silver Cross are now forced to simply sit back and watch this development cycle pass by while the City attempts, over the next five (5) to eight (8) years, at best, to find a way to serve the

development community and owners of undeveloped property with water resources under any reasonable scenario which does not render those properties economically worthless. The foregoing situation is again the result of the City's failure over the last nearly 15 years to implement plans to meet the projections in the 2007 WMP, which the City endorsed and adopted. The 2007 WMP contemplated that the City would anticipate growth and would construct the requisite infrastructure to support that growth. The 2007 WMP not only identified critical water issues, but outlined steps that needed to be taken to accommodate future development within the City. The City took no meaningful steps to address those issues, and had the 2007 WMP recommendations been implemented, as noted in the WWE Report, the City would not be facing the water crisis it currently faces. Now the City has adopted the 2021 WMP, and the Water and Planning Division Staff has clarified that, under the best of scenarios and assuming only 150 new housing starts per year (which is half of what is anticipated for the Amara development alone), future development within the City will be delayed for five (5) to eight (8) years. The City would now ask Applicant and Silver Cross to sit idle during the height of this current peak development cycle, and wait and see whether or not the City is somehow able to timely implement any of the proposals described in the 2021 WMP more effectively than was done over the past 15 years with the 2007 WMP.

When Applicant entered into the May 27, 2008 "Kane Ranch Annexation Agreement" (the "Kane Ranch Annexation Agreement") and agreed to annex the Kane Ranch Property into the City, it did so in reasonable reliance upon the City's endorsement and adoption of the 2007 WMP, reasonably expecting that the recommendations outlined within the 2007 WMP would be implemented to assure that requisite water resources and infrastructure would exist to support development of the Kane Ranch Property. Now, nearly 15 years later, it is clear that this reliance was misplaced. Moreover, it has proven detrimental to Applicant, Silver Cross and Holdings, which have now collectively wasted hundreds of thousands of dollars in reasonable anticipation of development of the Kane Ranch Property within the City which now cannot occur. Additionally, the Kane Ranch Annexation Agreement implied that the City would follow the 2007 WMP, which the City had recently adopted at the time the Kane Ranch Property was annexed. Notably, Black & Veatch described the 2007 WMP as "decisional," unlike the 2021 WMP, which is described as being "directional." By failing to implement the recommendations in the 2007 WMP, and by publicly expressing its inability to comply with its contractual obligation to provide water service to the Kane Ranch Property, the City has anticipatorily breached the Kane Ranch Annexation Agreement. In Colorado, anticipatory breach occurs where a party to a contract shows a clear and definite intention not to perform the contract before the time when its own performance is to be completed. Again, the City has anticipatorily breached the Kane Ranch Annexation Agreement by affirmatively stating that it will not accept development applications for the Kane Ranch Property and that it does not have the ability to provide water service to the Kane Ranch Property as required by the Kane Ranch Annexation Agreement.

Indeed, but for the fact that the City, at the time of the Kane Ranch Property annexation in 2008, appeared to have a viable plan to assure that water services would be available to the Kane Ranch Property upon development, Applicant would not have agreed

to annex the Kane Ranch Property into the City at all. Further, upon entering into the Kane Ranch Annexation Agreement, Applicant reasonably expected that builders and other developers of Applicant's Kane Ranch Property would be required to pay reasonable water tap fees to connect to the City's water infrastructure; Applicant did not anticipate, nor should it have expected to anticipate, that Applicant or its developer customers would be required to pay exorbitant water tap fees and millions of additional dollars for constructing water infrastructure development that the City should itself have provided by way of the recommendations set forth in the 2007 WMP. Even as recently as June 11, 2019, the City confirmed Applicant's reasonable expectations when the City's Planning Supervisor provided Holdings with an example of a water tap fee payment for proposed development. In doing so, with no suggestion or any mention of any anomalies concerning the City's ability to provide water services or the City's lack of water infrastructure, storage and treatment capacity, the City effectively misrepresented its water delivery capacity to Applicant. It is now clear that the City simply does not have the water treatment, delivery and storage infrastructure and water resources necessary to support development of the Kane Ranch Property, or any other undeveloped property within the City. Moreover, it is now clear that it will take a significant amount of time and an unreasonable amount of development dollars for water services to ever be available to the Kane Ranch Property.

In summary, the Amara project and the Kane Ranch Property are ready to move forward toward marketing, development and sales, and the current real estate market demand for residential and commercial property is at its peak. Nevertheless, all of Applicant's and Silver Cross's plans for proceeding with development of the Kane Ranch Property have now been wholly stopped. Applicant is now told, on the basis of the 2021 WMP, that because of the City's lack of water treatment, delivery and storage infrastructure and water resources, and because of the City's failure to implement the proposals and recommendations in the 2007 WMP, development of the Kane Ranch Property and all other undeveloped properties within the City will be halted for the foreseeable future. Further, the City has now expressly stated that it is unable to comply with its obligations under the Kane Ranch Annexation Agreement. Even assuming that the City adheres to the proposals and suggestions in the 2021 WMP more effectively than it did with the 2007 WMP, and even assuming the overly optimistic five (5) to eight (8) year projection is remotely accurate, Applicant and Silver Cross, together with all other owners of undeveloped property within the City, are further told that they themselves will have to independently bear the cost of the City's construction and completion of the various water storage, treatment and delivery infrastructure necessary to serve their properties. This situation is simply unworkable for the development community and for the Kane Ranch Property.

Based on all of the foregoing, it is patently clear that the City is unable to provide water service to the Kane Ranch Property as contractually required by the Kane Ranch Annexation Agreement and by Colorado law, and that the City does not have a viable plan for improving its ability to provide these services in the foreseeable future. By granting Applicant's request to disconnect the Kane Ranch Property from the City, the annexation of which by prior administrations now appears to have been misguided, the City has the

opportunity to significantly reduce its water supply and distribution issues. In fact, Section 3.3 “Summary Of Existing And Future Demands” – Tables 3-5 and 3-6 of the 2021 WMP concludes that if the City grants Applicant’s request for disconnection and thereby eliminates the City’s obligation to provide water services to the Kane Ranch Property, the City will reduce its annual water demands by fully 2,801 Acre Feet (AF) or 24.3%. On the basis of all of the foregoing, Applicant requests that the Council enact the attached ordinance, thereby disconnecting and de-annexing the Kane Ranch Property from the City and making the Kane Ranch Property a part of unincorporated El Paso County, Colorado.

SUBMITTED BY:



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EXHIBIT A

(Legal Description of the Property)

PARCEL A:

LOTS 3 AND 4 AND THE SOUTH HALF OF THE NORTHWEST QUARTER (ALSO DESCRIBED AS THE NORTHWEST ¼) OF SECTION 6, TOWNSHIP 16, RANGE 64 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO, EXCEPT THE EASTERLY 158.09 FEET OF GOVERNMENT LOT 3, (THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER) OF SECTION 6, TOWNSHIP 16 SOUTH, RANGE 64 WEST., EL PASO COUNTY, COLORADO, ALSO EXCEPT THE EASTERLY 1932 FEET OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 6, EL PASO COUNTY, COLORADO.

PARCEL B:

SECTION 1, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EXCEPT THAT PORTION CONTAINED WITHIN THE DEED FROM ALEXANDER F. KANE TO BFI FOUNTAIN LANDFILL, INC. RECORDED OCTOBER 28, 1991 IN BOOK 5896 AT PAGE 387, COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL C:

SECTION 2, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EXCEPT THAT PORTION CONTAINED WITHIN THE DEED FROM ALEXANDER F. KANE TO BFI FOUNTAIN LANDFILL, INC., RECORDED OCTOBER 28, 1991 IN BOOK 5896 AT PAGE 387, COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL D:

THE EAST HALF OF SECTION 3, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M. EXCEPT THAT PORTION CONVEYED TO THE FOUNTAIN MUTUAL IRRIGATION COMPANY BY WARRANTY DEED RECORDED SEPTEMBER 26, 1942 AT RECEPTION NO. 672640, COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL E:

THE EAST HALF OF TRACT 8 OF THE FOUNTAIN VALLEY LAND AND IRRIGATION COMPANY'S SUBDIVISION NO. 1 ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK L AT PAGE 42, LOCATED IN THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M. EXCEPT THAT PORTION LYING NORTH OF THE CANAL, COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL F:

THE WEST HALF OF TRACT 8 AND ALL OF TRACT 11 OF THE FOUNTAIN VALLEY LAND AND IRRIGATION COMPANY'S SUBDIVISION NO. 1, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK L AT PAGE 42, LOCATED IN THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL G:

THE NORTH HALF OF TRACT 12 OF THE FOUNTAIN VALLEY LAND AND IRRIGATION COMPANY'S SUBDIVISION NO. 1, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK L AT PAGE 42, LOCATED IN THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL H:

THE SOUTHEAST QUARTER OF TRACT 12 OF THE FOUNTAIN VALLEY LAND AND IRRIGATION COMPANY'S SUBDIVISION NO. 1, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK L AT PAGE 42, LOCATED IN THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL I:

TRACTS 6 AND 7 OF THE FOUNTAIN VALLEY LAND AND IRRIGATION COMPANY'S SUBDIVISION NO. 1 ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK L AT PAGE 42, LOCATED IN SECTION 3, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL J:

THE EAST HALF OF SECTION 10, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M. COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL K:

THE WEST HALF OF SECTION 11, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EXCEPT THAT PORTION OF THE SUBJECT PROPERTY, IF ANY, DESCRIBED WITHIN THE DEED FROM ALEXANDER F. KANE TO BFI FOUNTAIN LANDFILL, INC., RECORDED OCTOBER 28, 1991 IN BOOK 5896 AT PAGE 387, COUNTY OF EL PASO, STATE OF COLORADO.

LESS AND EXCEPT THE FOLLOWING REAL PROPERTY:

A parcel of land lying within Section 2 and Section 11, Township 16 South, Range 65 West of the 6th P.M., El Paso County, Colorado, being more particularly described as a portion of that land conveyed by Special Warranty Deed as recorded in the Real Property Records of El Paso County, Colorado at reception number 210014782.

Basis of Bearings: A line beginning at the East 1/16 (One Sixteenth) corner of said Section 2, being monumented by a ¾ inch diameter rebar with a 2 ½ inch diameter aluminum cap stamped "CCES T15S R65W S35 S2 E 1/16 T16S 2007 PLS 30118" and terminating at the Northeast corner of said Section 2, monumented by a 2-3/8ths inch diameter metal pipe with a 3-1/2 inch diameter aluminum cap stamped "SEC 35 SEC 36 SEC 1 SEC 2 LS 9489 T16S R65W", said line is assumed to bear North 89 Degrees 26 Minutes 29 Seconds East, a distance of 1323.58 feet.

Commencing at the aforementioned East 1/16th (One Sixteenth) corner;

Thence North 89 Degrees 26 Minutes 29 Seconds East, coincident with the north line of said Section 2, a distance of 784.93 feet;

Thence South 0 Degrees 33 Minutes 31 Seconds East, departing from said north line, a distance of 30.00 feet to a point coincident with the southerly right-of-way line of the 60-foot-wide right-of-way for Squirrel Creek Road and the true **Point of Beginning**;

Thence North 89 Degrees 26 Minutes 29 Seconds East, coincident with said southerly right-of-way, a distance of 366.57 feet to a point coincident with the east line of that 36-foot-wide ingress and egress access easement as recorded in Book 5896 at Page 387 in said real property records;

Thence South 2 Degrees 32 Minutes 21 Seconds West, departing said southerly right-of-way and coincident with said east line, a distance of 38.48 feet;

Thence South 0 Degrees 44 Minutes 00 Seconds West, coincident with said east line, a distance of 449.97 feet;

Thence South 2 Degrees 02 Minutes 20 Seconds West, coincident with said east line, a distance of 243.82 feet;

Thence South 0 Degrees 38 Minutes 06 Seconds East, coincident with said east line, a distance of 457.24 feet;

Thence South 18 Degrees 16 Minutes 57 Seconds East, coincident with said east line, a distance of 397.17 feet;

Thence South 0 Degrees 58 Minutes 10 Seconds East, coincident with said east line, a distance of 358.13 feet;

Thence South 1 Degrees 05 Minutes 41 Seconds East, coincident with said east line, a distance of 365.59 feet;

Thence South 1 Degrees 28 Minutes 05 Seconds East, coincident with said east line, 116.00 feet;

Thence South 39 Degrees 30 Minutes 35 Seconds West, departing said east line, a distance of 1232.02 feet, to a point coincident with an angle point in the south line of that public utility easement as recorded in said real property records at reception number 211013475;

Thence South 63 Degrees 19 Minutes 47 Seconds West, coincident with the southeasterly line of said public utility easement, a distance of 424.90 feet;

Thence South 40 Degrees 49 Minutes 47 Seconds West, coincident with said southeasterly line, a distance of 192.25 feet;

Thence South 4 Degrees 55 Minutes 54 Seconds East, coincident with said southeasterly line, a distance of 100.53 feet;

Thence South 84 Degrees 52 Minutes 57 Seconds West, coincident with said southeasterly line, a distance of 50.02 feet;

Thence North 5 Degrees 07 Minutes 01 Seconds West, coincident with said southeasterly line, a distance of 51.82 feet;

Thence South 40 Degrees 49 Minutes 47 Seconds West, coincident with said southeasterly line, a distance of 516.94 feet to a point coincident with the northwesterly boundary of the parcel of land described as "Parcel A" in that Special Warranty Deed as recorded in said real property records at reception number 201140882;

Thence South 88 Degrees 52 Minutes 29 Seconds West, coincident with said northwesterly boundary, a distance of 4.57 feet;

Thence South 0 Degrees 46 Minutes 58 Seconds East, coincident with said northwesterly boundary, a distance of 1201.86 feet to the most easterly corner of said westerly boundary;

Thence South 88 Degrees 50 Minutes 47 Seconds West, coincident with said northwesterly boundary, a distance of 928.66 feet to the most northerly corner of the most westerly line of said "Parcel A";

Thence South 0 Degrees 52 Minutes 41 Seconds East, coincident with said most westerly line, a distance of 3974.24 feet to the southwest corner of said "Parcel A";

Thence North 88 Degrees 50 Minutes 44 Seconds East, coincident with the south line of said "Parcel A", a distance of 57.64 feet to the northwest corner of that parcel of land as described in that Warranty Deed as recorded in said real property records at reception number 097046158;

Thence South 1 Degree 04 Minutes 05 Seconds East, coincident with the west line of said parcel, a distance of 772.75 feet, to a point coincident with the most southerly corner of said public utility easement as recorded at reception number 211013475 in said real property records;

Thence North 26 Degrees 52 Minutes 42 Seconds West, departing said west line and coincident with the southwesterly line of said public utility easement, a distance of 1018.53 feet;

Thence North 63 Degrees 16 Minutes 10 Seconds East, coincident with said southwesterly line, a distance of 216.09 feet;

Thence North 0 Degrees 51 Minutes 58 Seconds West, departing said southwesterly line, a distance of 3696.74 feet;

Thence North 21 Degrees 34 Minutes 13 Seconds East, a distance of 466.03 feet;

Thence North 40 Degrees 49 Minutes 47 Seconds East, a distance of 2052.08 feet;

Thence North 63 Degrees 19 Minutes 47 Seconds East, a distance of 447.69 feet;

Thence North 39 Degrees 30 Minutes 35 Seconds East, a distance of 639.11 feet;

Thence North 0 Degrees 45 Minutes 13 Seconds West, a distance of 2717.08 feet to the **Point of Beginning**.

The above described parcel contains 3,197,601 Sq. Ft. or 73.407 Acres of land, more or less.

LEGAL DESCRIPTION STATEMENT:

I, RICHARD E. BREWSTER, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF ARE CORRECT.



RICHARD E. BREWSTER, PROFESSIONAL LAND SURVEYOR
COLORADO P.L.S. NO. 28645
FOR AND ON BEHALF OF COLORADO SPRINGS UTILITIES

EXHIBIT B
(Form of Ordinance)

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FOUNTAIN, COLORADO APPROVING THE DEANNEXATION OF CERTAIN REAL PROPERTY LOCATED IN PORTIONS OF SECTIONS 1, 2, 3, 10 AND 11, TOWNSHIP 16 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO, AND IN A PORTION OF SECTION 6, TOWNSHIP 16 SOUTH, RANGE 64 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO.

WHEREAS, on _____, 2021, **THE CORUNDUM GROUP V LLC**, a Colorado **limited liability company** ("Owner") filed with the City of Fountain a Petition for Deannexation pursuant to Section 31-12-501, Colorado Revised Statutes (C.R.S.) (the "Petition"), requesting that the City of Fountain enact an ordinance deannexing and disconnecting the real property legally described and depicted in the Land Survey Plat attached as **Exhibit A** hereto and incorporated herein by this reference (the "Property") from the City of Fountain;

WHEREAS, Owner is the sole owner of the Property that is the subject of the Petition, which Property is currently located within the city limits of the City of Fountain;

WHEREAS, not having previously adopted a disconnection process, the Fountain City Council has chosen to adopt the process for disconnection set forth in Section 31-12-501 *et seq.*, Colorado Revised Statutes (C.R.S.);

WHEREAS, after notice provided pursuant to Section 31-12-108(2), C.R.S., the Fountain City Council held a public hearing on the proposed disconnection; and

WHEREAS, the Fountain City Council finds that it is in the best interests of the City of Fountain to disconnect the Property from the City of Fountain into El Paso County, and that the City of Fountain will not be prejudiced by the proposed deannexation, and the Fountain City Council further finds that no terms or conditions shall be imposed on the disconnection.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FOUNTAIN, COLORADO:

SECTION 1. The City of Fountain hereby adopts the disconnection process set forth in Section 31-12-501, Colorado Revised Statutes (C.R.S.) for purposes of the disconnection contemplated by this Ordinance.

SECTION 2. The Property is hereby disconnected from, and is no longer a part of, the City of Fountain, Colorado, and is hereby made a part of the County of El Paso, Colorado.

SECTION 3. The City Clerk is hereby authorized and directed to:

a. File one copy of this Ordinance along with the Land Survey Plat in the office of the City Clerk of the City of Fountain;

b. Certify and file two (2) copies of this Ordinance and the Land Survey Plat with the El Paso County Clerk and Recorder's Office; and

c. Request the El Paso County Clerk and Recorder's Office to file one certified copy of this Ordinance and the Land Survey Plat with the Division of Local Government of the Department of Local Affairs, State of Colorado.

SECTION 4. Disconnection of the Property from the City of Fountain shall be complete and effective on the "Effective Date" set forth in Section 5 below.

SECTION 5. This Ordinance shall take effect thirty (30) days after final publication, subject to compliance with the filing requirements of Section 31-12-501(4), Colorado Revised Statutes (C.R.S.) (the "Effective Date").

SECTION 6. If any provision of this Ordinance should be found by a court of competent jurisdiction to be invalid, such invalidity shall not affect the remaining portions or applications of this Ordinance that can be given effect without the invalid portion, provided that such remaining portions or application of this Ordinance are not determined by the court to be inoperable.

I hereby attest and certify that the within and foregoing Ordinance was introduced and read on first reading at a regular meeting of the Fountain City Council on the ___ day of _____, 2021.

_____, Mayor

ATTEST:

Silvia Huffman, City Clerk

APPROVED AS TO FORM:

Troy Johnson, City Attorney

EXHIBIT C

(Notified Special Districts)

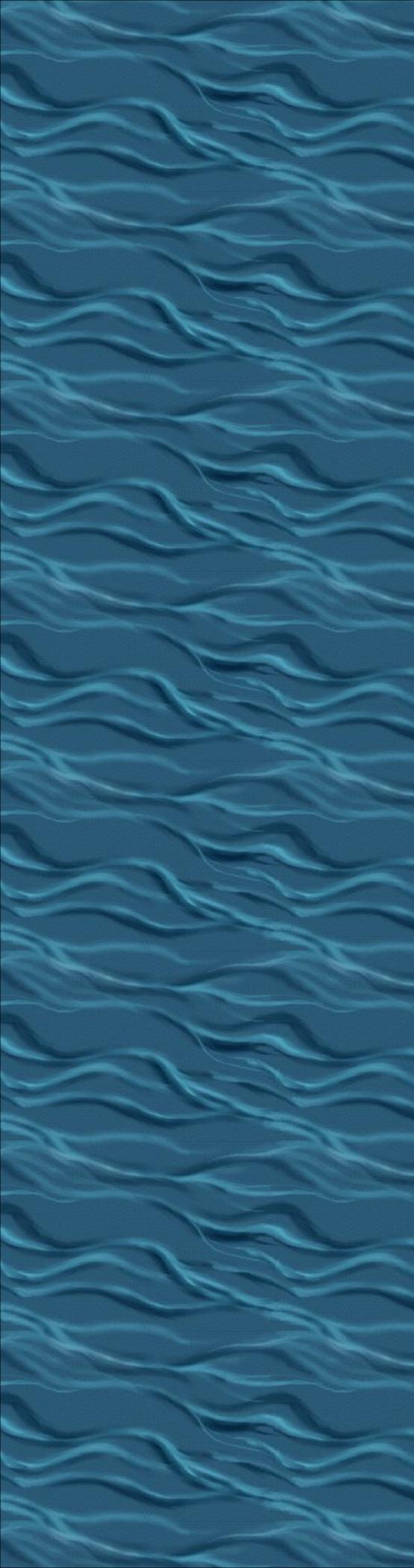
1. Fountain General Improvement District No. 1

Fountain General Improvement District No. 1
Board of Directors
c/o City of Fountain
116 S. Main Street
Fountain, Colorado 80817
Attn: Silvia Huffman, City Clerk
Attn: Troy Johnson, Esq., City Attorney

2. Hanover Fire Protection District

Board of Directors
Hanover Fire Protection District
13325 Old Pueblo Road
Fountain, CO 80817

EXHIBIT D
(WWE Report)



City of Fountain Water System Capacity Evaluation

Prepared for Hogan Lovells US LLP



Wright Water Engineers, Inc.

November 2021
Job No. 211-050.000

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ACRONYMS and ABBREVIATIONS

ADD	average daily demand
AF	acre-feet
cfs	cubic feet per second
CDPHE	Colorado Department of Public Health and Environment
CDSS	Colorado Decision Support System (data base)
CS-U	Colorado Springs Utilities
DWR	Division of Water Resources
Fry-Ark	Fryingpan-Arkansas Project
FVA	Fountain Valley Authority
FVC	Fountain Valley Conduit
GAC	granular activated carbon
gpd	gallons per day
gpcd	gallons per capita per day
gpm	gallons per minute
LTEC	long term excess capacity contract (Pueblo Reservoir storage)
MDD	maximum daily demand
MF	microfiltration (water treatment)
MG	million gallons
MGD	million gallons per day
PFAS	Perfluoroalkyl and Polyfluoroalkyl Substances
PPRWA	Pikes Peak Regional Water Authority
RO	reverse osmosis (water treatment)
sfh	single family house
SDS	Southern Delivery System
SEO	State Engineer's Office
SECWCD	Southeastern Colorado Water Conservancy District
WARA	Widefield Aquifer Recharge Association
WTP	water treatment plant

CONVERSIONS

1 MG = 3.07 AF

1 cfs = 449 gpm

1 AF = 325,851 gallons

1 MGD = 1.5466 cfs-day

1 cfs for 24 hours = 646,560 gpd = 0.6466 MGD = 1.9835 AF

City of Fountain Water System Capacity Evaluation

EXECUTIVE SUMMARY

The 2,500-acre Kane Ranch was annexed into the City of Fountain (herein referred to as Fountain) in 2008. At the time of the annexation, the *2006 Water Master Plan*, issued March 2007 (herein referred to as the *2007 Master Plan*) prepared by Black & Veatch was available. The *2007 Master Plan* identified water system needs and improvements necessary to meet existing and future needs. A recommended capital improvement program was outlined. Fourteen years later, few of the recommended improvements have been made.

The *2021 City of Fountain Water Master Plan (Draft)* dated September 28, 2021 (herein referred to as the *2021 Master Plan*), gives the annual water demand in 2020 at 3,137 acre-feet and a peak day water demand at 5.32 million gallons per day (MGD). The *2021 Master Plan* makes clear that Fountain is essentially at its full water service capacity in that the water treatment capacity is 4.9 MGD, below the maximum day demand of 5.32 MGD. The maximum day demand is the capacity required for water treatment and water delivery.

Additionally, Fountain’s water delivery infrastructure has an existing capacity of 5.85 MGD, only 10 percent higher than the existing demand. According to projections made in the *2021 Master Plan*, additional raw water storage will be needed when the annual water demand reaches 4,500 acre-feet, about 1.5 times the current demand and additional water rights will be required when the annual demand reaches 6,000 acre-feet, roughly twice the existing demand. These limitations are contrasted with the *2021 Master Plan* projected demands by scenario as given below:

	Scenario 1. Existing Demand	Scenario 2. Planned Development without Kane Ranch	Scenario 3. Planned Development with Kane Ranch
Water Demand			
Total Annual , acre-feet	3,137	8,726	11,527
Total Maximum Day, (MGD)	5.3	14.8	19.6

The Scenario 2 demands are nearly 3 times the existing demand and the Scenario 3 demand is nearly 4 times the existing demand.

The *2021 Master Plan* lists five potential projects to meet the water treatment challenge, however, given the lack of implementation of recommended improvements from the *2007 Master Plan*, there is reason to doubt Fountain’s ability to move ahead with a project or projects in a timely fashion. As stated in the *2021 Master Plan*, “Whichever of these Projects is chosen to proceed through the development process, it will take time, probably years, from inception to completion.” In addition to the projects proposed to meet the water treatment challenge, additional time and resources will be required to develop Fountain’s water supply portfolio and transmission infrastructure to meet projected demands.

1.0 INTRODUCTION

Wright Water Engineers, Inc. (WWE) was engaged by Hogan Lovells on behalf of their clients, The Corundum Group V LLC (Corundum) and Silver Cross Development, Inc. (Silver Cross) to evaluate the capability of Fountain to provide water service to the clients' properties. Figure 1 shows the locations of the Kane Ranch and the Tee Cross Properties. The approximately 2,500-acre Kane Ranch was annexed into Fountain in 2008. In addition to the Kane Ranch Property, Corundum and an affiliate of Silver Cross, La Plata Cruz Holdings, LLC were planning to develop the approximately 3,200-acre Tee Cross Properties located adjacent to Fountain annexed areas. Together the properties were planned to be developed as a single development, "Amara."

A municipal water system includes numerous components that must be in place to provide a safe and reliable water supply. The Fountain system components include the water supply (water rights and contract water), reservoir storage, physical water delivery, and water treatment capacity. These elements must be in balance. The overall system capacity is set by the minimum capacity element. This evaluation examines these four elements to determine the current capacity and needed capacity improvements to serve projected water demands.

WWE in its evaluation relied upon information publicly available, on documents provided by Fountain, public presentations by the Fountain staff to the City Council, and on the 2021 *City of Fountain Water Master Plan (Draft)* (herein referred to as the *2021 Master Plan*). To our knowledge, the *2021 Master Plan*, issued as a draft dated September 28, 2021, had not been revised as of October 26, 2021, the date of the public presentation and the Council approval of the plan. The previous *2006 Water Master Plan*, issued March 2007 (herein referred to as the *2007 Master Plan*), was also relied upon.

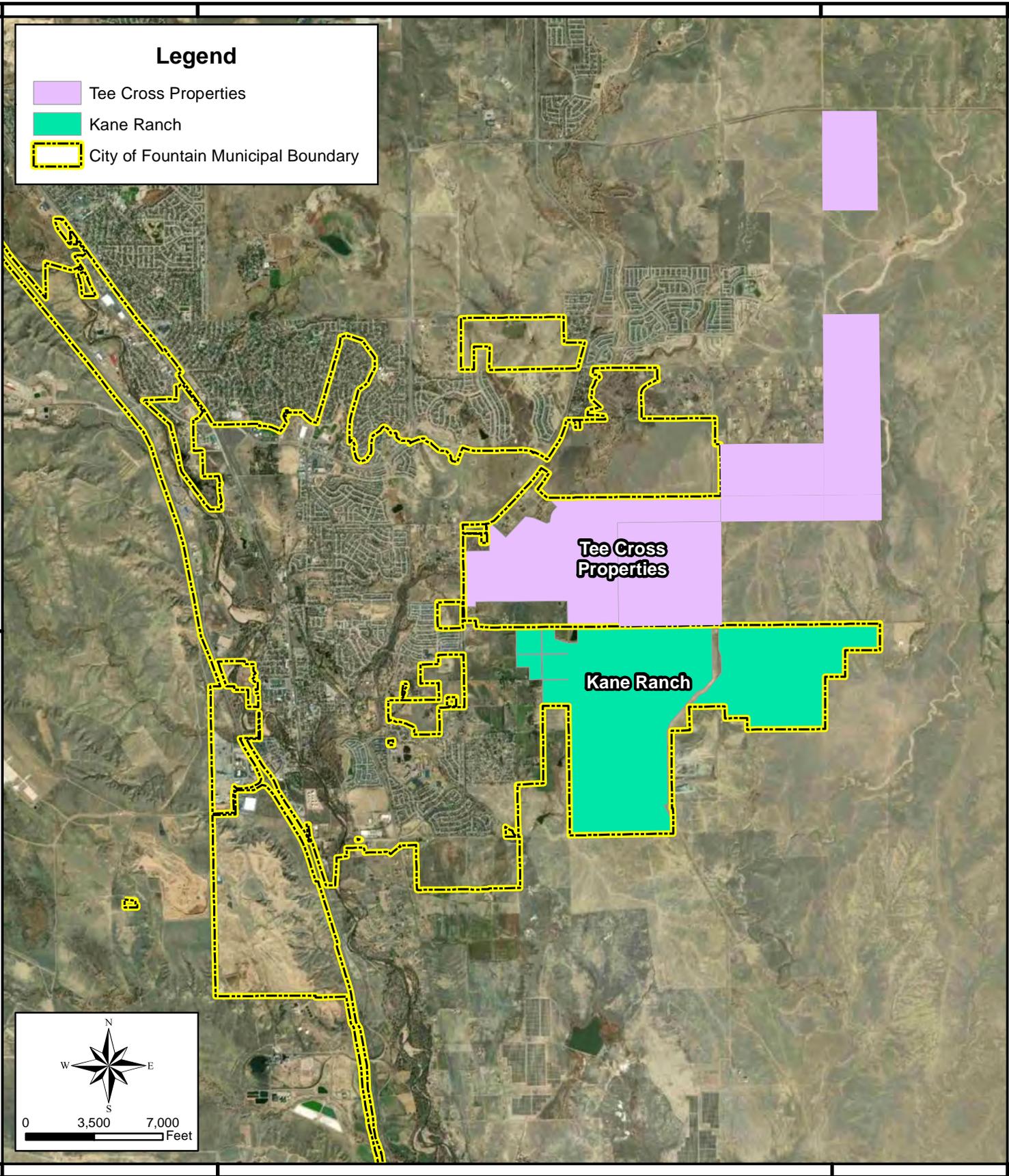
1.1 Overview Fountain Water System

Fountain currently receives a large portion of its water supply from the Fryingpan-Arkansas (Fry-Ark) Project which is a federal project managed by the Southeastern Colorado Water Conservancy District (SECWCD). The Fry-Ark Project facilities are shown on Figure 2 and include a transmountain diversion from the Colorado River basin into the Arkansas basin near Leadville. The Project also includes diversions of Arkansas basin water.

The Fry-Ark Project water is stored in Pueblo Reservoir and is delivered to Fountain and other water providers [Colorado Springs Utilities (CS-U), Widefield and Security] via the Fountain Valley Conduit (FVC) pipeline. A water treatment plant is located along the FVC, and the finished (treated) water is piped to water storage tanks for delivery to Fountain. Fountain also has rights to delivery from Pueblo Reservoir via the Southern Delivery System (SDS). The FVC and the SDS water transmission pipelines are shown on Figure 2. Fountain owns Fountain Creek surface and groundwater rights, other Arkansas River surface water rights, water storage contracts in Pueblo Reservoir, other local water storage, and water right exchanges to various locations. Wells in the Fountain Creek alluvium provide supplemental water to meet existing peak summer needs.

Legend

- Tee Cross Properties
- Kane Ranch
- City of Fountain Municipal Boundary



EL PASO COUNTY, COLORADO

KANE RANCH AND TEE CROSS PROPERTY LOCATION

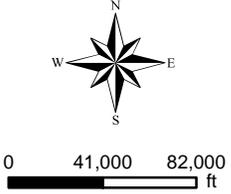
CITY OF FOUNTAIN WATER SYSTEM
CAPACITY EVALUATION

PROJECT NO.
211-050.000

FIGURE
1



Path: Z:\Project Files\21\211-050\211-050.000\CAD-GIS\GIS01_MXD\Fryingpan_Arkansas_Facilities.mxd

 <p>WRIGHT WATER ENGINEERS, INC.</p>	<h2>FRYINGPAN-ARKANSAS FACILITIES AND SOUTHERN DELIVERY SYSTEM</h2> <p>CITY OF FOUNTAIN WATER SYSTEM CAPACITY EVALUATION EXHIBIT D</p>	 <p>0 41,000 82,000 ft</p>	<p>PROJECT NO. 211-050.000</p>	<p>FIGURE 2</p>
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1.2 Fountain Water System Components

This report provides a summary of the existing and projected water demand (Section 2) which set the capacity needed for each of the water system components. This report includes information on the topics below both as they exist currently and as projected or planned:

- Water Supply (Water Rights, Contract Rights for Reservoir Storage) (Section 3)
- Water Delivery Capacity (Section 4)
- Water Treatment Capacity (Section 5)
- Treated Water Storage (Section 6)
- Timing (Section 7)

2.0 WATER DEMAND

Water demand is a function of population, land use, irrigation use, conservation measures, and climatic conditions. Development types (for example, residential versus commercial) have different use patterns. Water demand varies year to year based on climatic conditions and varies with season as well as time of day. Water demand parameters and typical unit of measurement follows:

- Annual demand defines the water rights and water storage requirements and is typically expressed in terms of acre-feet (AF). To envision one AF, think of a football field including endzones covered with one foot of water. The annual demand in 2020 was 3,137 AF.
- Average Day Demand (ADD) is the annual demand divided by 365 days per year. ADD is typically expressed in million gallons per day (MGD). To convert from AF per day to MGD, divide by 3.07. The 2020 ADD was 2.8 MGD (3,137 AF/(365 days*3.07 AF/MG)).
- Maximum Day Demand (MDD) is the peak day water use in a year and is expressed in MGD. The MDD is the design criterium for water delivery and water treatment infrastructure. The 2020 MDD was 5.32 MGD.
- Peaking Factor is the ratio of the MDD to ADD. The current peaking factor is 1.9 (5.32/2.8).
- Peak Hour Demand (PHD) plus required fire flow demand rates are the criteria for sizing treated water storage tank volume. The peak hour demand is estimated at a ratio of 1.57 to the MDD. The current peak hour demand is approximately

City of Fountain Water System Capacity Evaluation

350,000 gallons [5,320,000 gallons*1.57/24 hours]. This peak hour demand can also be expressed as a flow rate of 5,800 gallons per minute (gpm).

The water demands as outlined in the *2007 Master Plan* and the *2021 Master Plan* are described in the following sections.

2.1 2007 Master Plan

WWE reviewed the *2007 Master Plan*, which provided projections for future demand. The 2006 demands and projected demands for year 2020 and 2021 are shown in Table 1. Other metrics for water demand presented in Table 1 include: non-revenue water (the water that enters the system but is not included in metered billings, due to either system leakage, theft, or non-metered city use), average residential water use in gallons per day, and residential water use as a percentage of total water use.

Table 1. Water Demands from 2007 Master Plan

	2007 Master Plan	2007 Master Plan Projection (with conservation)
Population	19,200 [2005]	42,000 [2020 projection]
Raw water Average daily demand (MGD)	3.0 [2006]	6.8 [2021 projection]
Raw water Maximum daily demand (MGD)	7.6 [2006]	17.5 [2021 projection]
Total raw water annual demand (AF/yr)	3,311 [2006]	7,632 [2021 projection]
Non-revenue water	14% [2006]	ND
MDD:ADD peaking factor	2.6 [2006 design ratio]	2.6 [2021 projection]
Treated Residential water use (gpd/person)	100 gpd [2006]	115 gpd [2020 projection]
Residential water use as percentage of total	78% [prior to 2002]	65% [2020 projection]

The *2007 Master Plan* projected a year 2020 population of 42,000, which is approximately 12,000 more people than the actual 2019 population. The projected 2020 annual demand and the MDD were more than double the 2006 demand.

Figure 3 (Figure 2-1 in the *2007 Master Plan*) shows large portions of the Kane Ranch and the Tee Cross Property as being within the Urban Service Areas and a portion of the Kane Ranch is shown as being within the municipal boundary of Fountain. The *2007 Master Plan* outlined steps for developing new water supply and treatment infrastructure to meet the projected demand. Plans for new sources and treatment capacity “were developed to meet interim and ultimate water demands.”

As of 2007, the need for additional supply, distribution infrastructure, and treatment capacity were identified. Had the proposed plans and alternatives been followed, Fountain would be in a better position to serve the projected population.

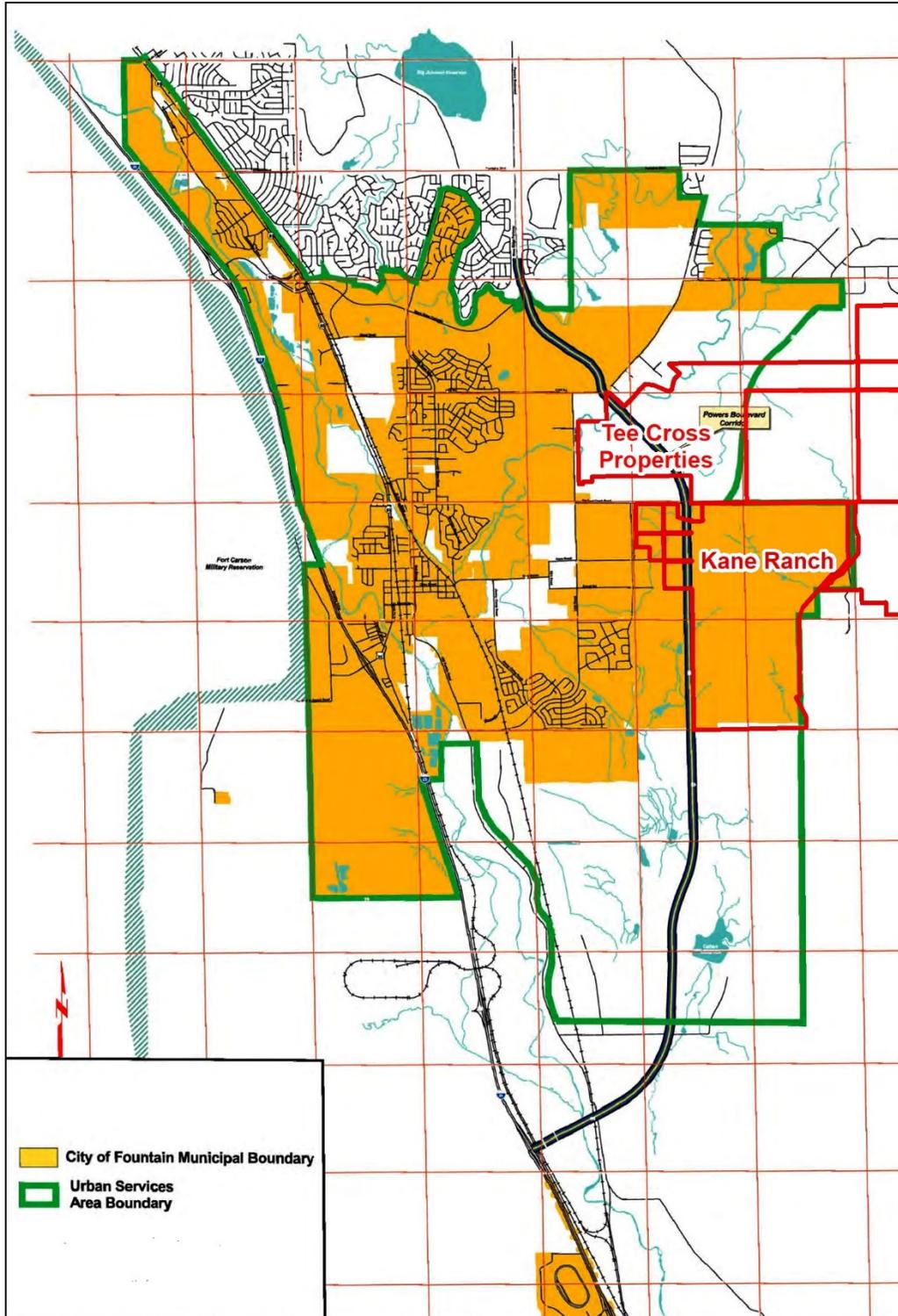


Figure 3. 2007 Fountain Water Service Planning Boundary
(Property boundaries added by WWE)

2.2 2021 Master Plan

The *2021 Master Plan* includes projections for future development and associated demand. The demand projections are presented in Table 2 along with the *2007 Master Plan* projected 2021 demands for comparison. Scenario 1 only includes demands for the existing system. Scenario 2 includes “all planned developments except for Kane Ranch, as well as all identified infill and urban renewal areas (URAs)”, and Scenario 3 includes “all planned developments (including Kane Ranch) as well as all identified infill and URAs.”

Table 2. Future Water Demands from Water Master Plans

	2007 Master Plan Projection for 2021	2021 Master Plan		
		Scenario 1 (existing system demands)	Scenario 2 (planned development without Kane Ranch)	Scenario 3 (planned development with Kane Ranch)
Annual water demand (MGD)	6.8	2.8	7.8	10.3
Maximum daily demand (MGD)	17.5	5.3	14.8	19.6
Annual water demand (AF)	7,632	3,137	8,726	11,527

Both Scenarios 2 and 3 project significant increases in demand from the current Scenario 1 level. The Scenario 2 annual water demand is 15 percent higher than that projected for 2021 in 2007 while the Scenario 3 projected annual water demand is 51 percent higher. The Scenario 3 MDD is 19.55 MGD versus the 2007 projection of 17.5 MGD.

The Kane Ranch water demands would be the difference between Scenario 3 and Scenario 2 or 2.5 MGD for ADD, 4.8 MGD for MDD, and 2,801 AF of annual water demand.

A comparison of the ADD and MDD for Scenarios 1, 2, and 3 is presented in Figure 4.

City of Fountain Water System Capacity Evaluation

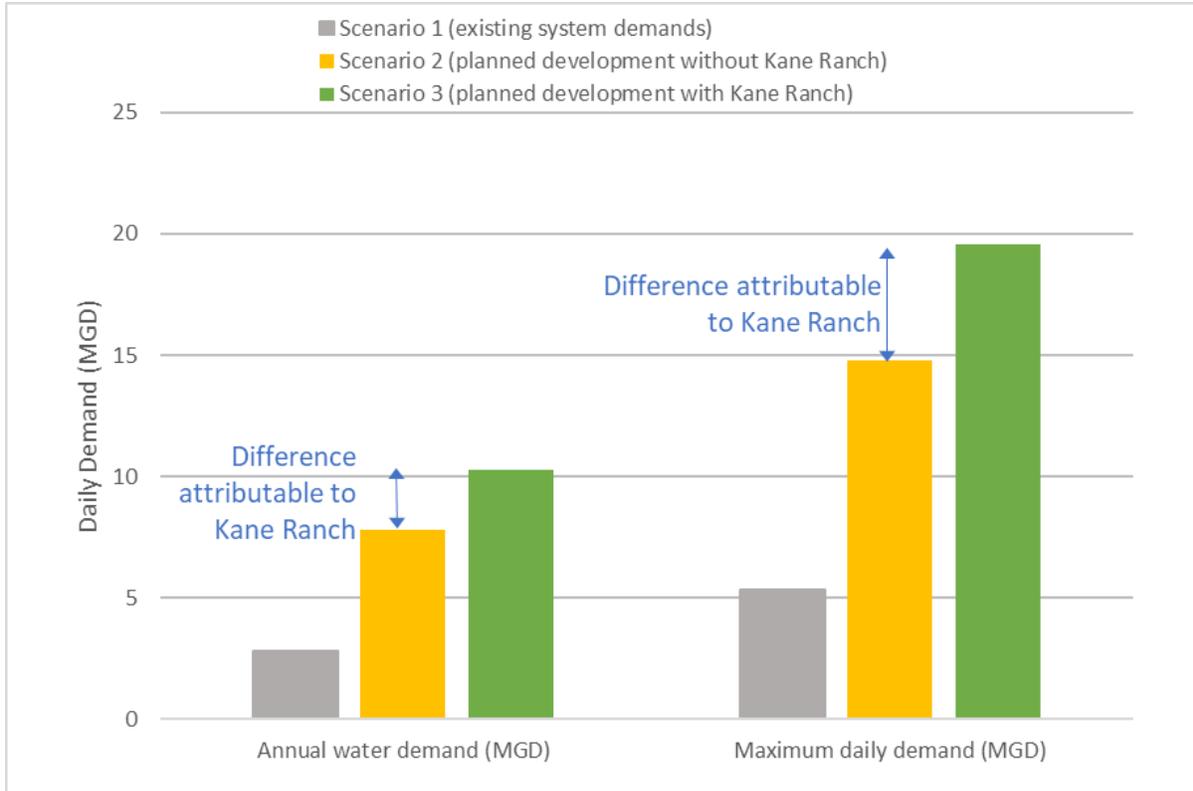


Figure 4. Average Daily and Maximum Daily Demand by Scenario

3.0 WATER SUPPLY AND WATER RIGHTS

Fountain has several types of water supply: contract supplies such as the Fry-Ark Project and the SDS; surface water rights and augmentation plans; groundwater rights for wells; and exchange rights. All of these types of water supply are administered under the prior appropriation system, which can be described as “first in time, first in right.” The *2021 Master Plan* provides an evaluation of each of these types of water supply for three scenarios of demand as given in Table 3.

Prior to issuance of the *2021 Master Plan*, WWE conducted a review of Fountain’s water rights using public records from the Division of Water Resources (DWR) Colorado Decision Support System (CDSS) as well as documents provided by Fountain. This review included identifying the water rights interests in the Fountain water portfolio and outlining the estimated average year and dry year yield in terms of diversion and consumable use. The WWE initial evaluation of Fountain’s current water rights was generally in agreement with the findings regarding the yield of their existing water rights.

3.1 Contract Water and Water Rights

The Fry-Ark Project water supply includes a large portion of transmountain water (water diverted from the western slope of Colorado). As this imported water is new water to the Arkansas basin, it can be used to extinction, that is, after its first use, such as in a municipal system, the return flows from the wastewater treatment facility and from lawn irrigation can be reused. For Fountain, this water could be used for augmentation of wells or stored directly or by exchange to Pueblo Reservoir or other reservoirs. Fountain’s 2,000 AF Fry-Ark Project water is delivered to Pueblo Reservoir and is delivered to the Fountain area by the Fountain Valley Authority facilities, the FVC, and the water treatment plant. Fountain’s storage rights in Pueblo Reservoir include 7,761 AF Fry-Ark Project storage, a long term excess capacity contract (LTEC) of 2,500 AF, and up to 1,000 AF subcontract with Southeastern Colorado Water Conservancy District (SECWCD). Fountain also has temporary use of 500 AF for Super Ditch water storage in Pueblo Reservoir.

The Fry-Ark Project West Slope water rights are relatively junior in nature and should a call occur from the 1922 Colorado River Compact, diversions by the Fry-Ark Project would be curtailed at times. A “call” occurs in times of shortage when the owner of a decreed water right will make a “call” for water with a resulting curtailment of junior water rights as necessary until the senior right needs are satisfied. There is also a risk that with climate change, the physical availability of water will be reduced. Due to the heavy reliance on the Fry-Ark Project, the *2021 Master Plan* modeled three levels of Fry-Ark Project water deliveries that could realistically occur in the future: 1) No Curtailment, 2) Moderate Curtailment (yield reduced to one-half), and 2) Severe Curtailment (yield reduced to one-third).

Fountain’s other existing water supply comes from groundwater wells which are augmented through three augmentation plans. An augmentation plan is a court decreed plan to allow diversion by a junior water right that would be out-of-priority, but is allowed to divert, or pump

City of Fountain Water System Capacity Evaluation

in the case of a well, by providing replacement water to satisfy a call for water by a senior water right. The Fountain augmentation plans quantify the historic consumption use of water by senior irrigation water rights for use as replacement sources, thereby allowing the Fountain wells to deplete the stream out-of-priority. The three augmentation plans include Case Nos. W-4396/W-4559 (“Augmentation Plan I”), Case Nos. 85CW110/91CW0021 (“Augmentation Plan II”), and Case No. 01CW0146 (“Augmentation Plan III”). Nearly all of Fountain’s water rights have been changed from irrigation use to municipal and augmentation uses, although a few water rights remain solely decreed for irrigation. Fountain also has a contract to use the Venetucci Wells, which have an augmentation plan decreed in Case No. 07CW0068.

In addition to the wells, Fountain has surface water rights for diversion from Little Fountain Creek, Fountain Creek, and the Arkansas River. A summary of Fountain’s water rights and respective yields is given in Appendix A, which is a reproduction of Table 6 from the *2021 Master Plan*. This table provides the specific water rights that compose Fountain’s water rights portfolio and their respective annual yields. Table 3 gives Fountain’s existing dry year, average year, and wet year yield considering different scenarios of potential reduction in the Colorado River water delivery. The existing dry year yield with a severe reduction in the Fry-Ark Colorado River delivery is 4,807 AF as compared to the current demand of 3,137 AF.

Table 3. Fountain Existing Water Rights Yield, from *2021 Master Plan*

	Dry year yield (AF)	Average year yield (AF)	Wet year yield (AF)
No reduction in Colorado River water delivery	6,184	6,676	9,725
Moderate reduction in Colorado River water delivery	5,186	6,297	9,345
Severe reduction in Colorado River water delivery	4,807	5,918	8,966

A direct comparison of annual yield and demand can be misleading because year-to-year storage carryover is used to meet shortfall of direct surface water supplies during dry years. The *2021 Master Plan* concludes that they “do not presently anticipate that the City [Fountain] will require additional water rights until reaching a demand of around 6,000 acre-feet per year, even with severe curtailment of the Fry-Ark Project water rights. [...] the City has a robust portfolio of water rights.” In terms of additional storage, the *2021 Master Plan* concludes that additional storage located on Fountain Creek (Fountain Creek Reservoir) may eventually be necessary, but likely not until Fountain’s demand is between 4,500 and 5,000 AF/year.

Fountain currently leases 500 AF/year from the Lower Arkansas Valley Super Ditch Company, but this lease volume could be increased to 3,800 AF per year. However, as noted in the *2021 Master Plan*, there are numerous senior water right exchanges on the Arkansas which limit the

City of Fountain Water System Capacity Evaluation

potential to exchange the Super Ditch water to Pueblo Reservoir, and thus limit the degree to which Fountain can utilize this water.

A comparison of the current and projected annual demands from the *2021 Master Plan* with the demands at which additional water rights are required (estimated 6,000 AF by W.W. Wheeler) and the demands at which additional storage is required (estimated between 4,500 and 5,000 AF by W.W. Wheeler) is presented in Figure 5. In order to meet the projected annual demands for both Scenario 2 and Scenario 3, Fountain will require additional water rights and storage.

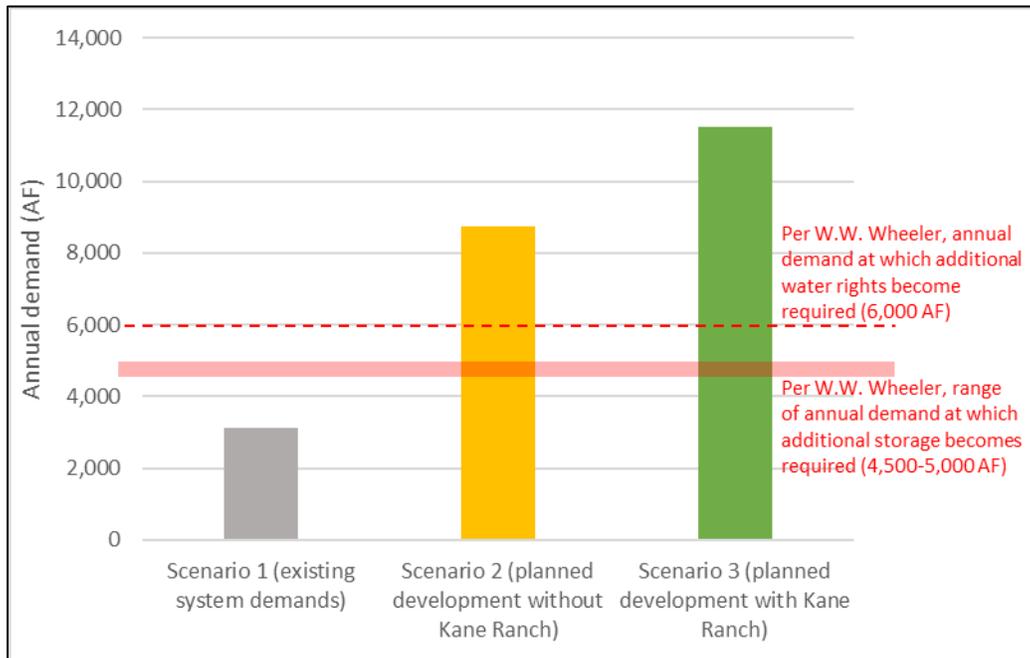


Figure 5. Annual Demand Levels and Required Additional Water Rights and Storage

3.2 Raw Water Storage

The Fountain water storage in Pueblo Reservoir totaling 11,261 AF (7,761 AF Fry-Ark Project water, 2,500 AF LTEC, and up to 1,000 AF subcontract with SECWCD) is available to store water in average and above average years to provide carryover water for use in dry years. The Fountain criterium for storage volume is to have at least two times the annual water demand which is a total storage volume of 17,500 AF for Scenario 2 and 23,000 AF for Scenario 3, or an increase in volume of approximately 6,500 AF for Scenario 2 and another 5,600 AF for Scenario 3.

Fountain purchased the LaFarge/Martin Marietta pit land to construct the proposed Fountain Creek Reservoir. The anticipated water storage volume for this reservoir is 6,000 AF meeting a portion of projected water storage volumes. Extraction in the pits was completed in 2018, and mitigation activities are currently being completed under the terms of the state permit. According to internal Fountain documentation, this mitigation is likely to take two to four years to complete

City of Fountain Water System Capacity Evaluation

before construction can even begin. In 2008, the total funding necessary to complete this project was estimated to be \$17-\$19 million.

As shown on Figure 5, additional water rights are required when the annual demand reaches 6,000 AF. Table 4 outlines the amount of water rights that will need to be acquired in order to serve projected demands in Scenarios 2 and 3 for the three levels of reduction analyzed for the Fry-Ark Project Colorado River supply. Water rights from both the Arkansas River (generally above Pueblo Reservoir) and Fountain Creek will be required.

Table 4. Additional Water Rights Required to meet Projected Demands

(All values in AF per year)

(1) (2) (3) (4) (5)

Scenario 2 — Additional Demand — 2,726 AF

Fry-Ark Water Colorado River Reduction	Required Deliveries	Required Consumable Water Rights		
		Arkansas River	Fountain Creek	Total
No reduction	2,304	1,154	287	1,441
Moderate reduction	2,726	1,365	340	1,705
Severe reduction	3,147	1,575	393	1,968

Scenario 3 — Additional Demand Beyond Scenario 2 — 2,801 AF

Fry-Ark Water Colorado River Reduction	Required Deliveries	Required Consumable Water Rights		
		Arkansas River	Fountain Creek	Total
No reduction	3,056	0	1,528	1,528
Moderate reduction	3,056	0	1,528	1,528
Severe reduction	3,056	0	1,528	1,528

Note: The above water deliveries and required water rights are taken from Section 5.2, Data Tables, Table 10 of the 2021 Master Plan .

Column (5) is equal to the sum of Columns (3) and (4).

Up to 1,575 AF per year of Arkansas River consumable water rights and nearly 400 AF per year of Fountain Creek consumable water rights for a total of approximately 2,000 AF per year must be acquired to serve the Scenario 2 projected demands. For Scenario 3, an additional 1,500 AF per year of Fountain Creek water rights must be acquired (in addition to what was already acquired to meet Scenario 2 demands). Presumably the Arkansas River water rights acquisitions shown for Scenario 2 use up the pipeline capacity in the FVC and SDS, and therefore no Arkansas water rights acquisition is shown for Scenario 3.

With sufficient water rights in-line, appropriate water delivery and treatment infrastructure is needed to utilize the rights. Sections 4.0 and 5.0 outline the necessary water delivery and treatment infrastructure capacity, respectively, to put the water rights to use to meet projected demands.

4.0 WATER DELIVERY CAPACITY

Water stored in Pueblo Reservoir from the Fry-Ark Project and other Fountain water sources is delivered to Fountain through the FVC and in the future, with infrastructure connections, direct deliveries from the SDS. (Participation in the SDS project was evaluated in the 2007 Master Plan with two levels of participation analyzed, 5,000 AF annually and 2,500 AF annually, with the 2,500 AF level selected.) Fountain has an agreement with Colorado Springs -Utilities (CS-U) to trade Fountain’s delivery capacity in the SDS for CS-U’s delivery capacity in the FVC since there is not currently a connection from SDS to Fountain’s municipal system.

The FVC conveys a total of 4,400 AF per year to Fountain with 1,900 AF of Fry-Ark 1st use water and fully consumable water (the water mix varies with climatic conditions) and 2,500 AF of fully consumable water deliveries via a trade with CS-U of Fountain’s SDS water. Remaining demand capacity is through wells with a current annual capacity of 1,569 AF. The existing treated water peak day delivery rate of 5.85 MGD is described in an April 7, 2021, letter by W.W. Wheeler to Taylor Murphy, Water Resource Engineer, City of Fountain. The peak delivery rate includes 1.3 MGD from wells and 4.55 MGD through the FVC.

Figure 6 shows visually the current delivery capacity, and the delivery capacities needed for future demands (14.8 MGD and 19.55 MGD, respectively). The Scenario 2 additional delivery capacity needed is 9.5 MGD (Scenario 2 – Scenario 1) and for Scenario 3 is 4.75 MGD (Scenario 3 – Scenario 2).

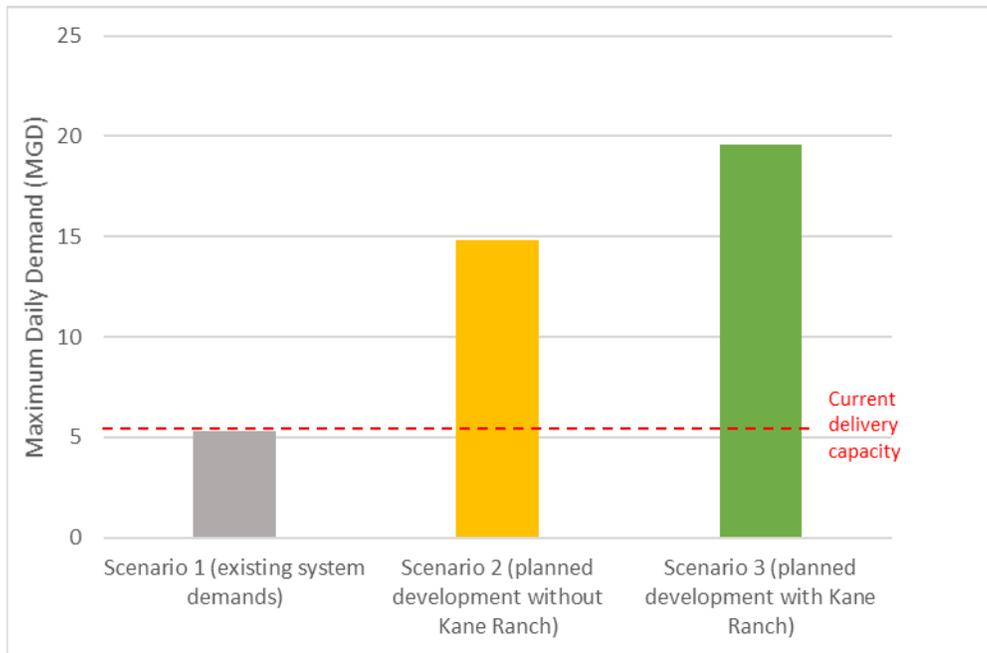


Figure 6. Current Delivery Capacity and Projected Maximum Daily Demands

City of Fountain Water System Capacity Evaluation

The *2007 Master Plan* included recommendations for water system infrastructure with the recommended system improvements shown on Figure 7, an excerpt of a portion of Figure 7-1 from the *2007 Master Plan*. The water main improvements are divided into two phases, Phase 1 recommended for construction by 2015 (noted on figure by long dash line), and Phase 2 (noted by dotted line on figure) after 2015. The figure is color coded to show the water pressure zones: blue is the low zone, green is the Little Ranches zone, and red is the high pressure zone. A major Phase 1 recommendation was the construction of an approximately 4-mile 36-inch diameter transmission line from the 3 MG Southwest Reservoir to a booster pumping station along Wilson Road which is highlighted in yellow. This is an important link in that it connects the existing 3 MG water storage tank to the southern portion of the system with pumping stations to boost the water to the upper pressure zones.

Figure 8 is a map of water system improvements from the October 26, 2021 public presentation to City Council of the *2021 Master Plan*. The redlines were described as being the major transmission lines, not the distribution system pipelines. Note that the Phase 1 36-inch-diameter transmission line recommended in the *2007 Master Plan* is still shown in the *2021 Master Plan* as a needed improvement (also highlighted).

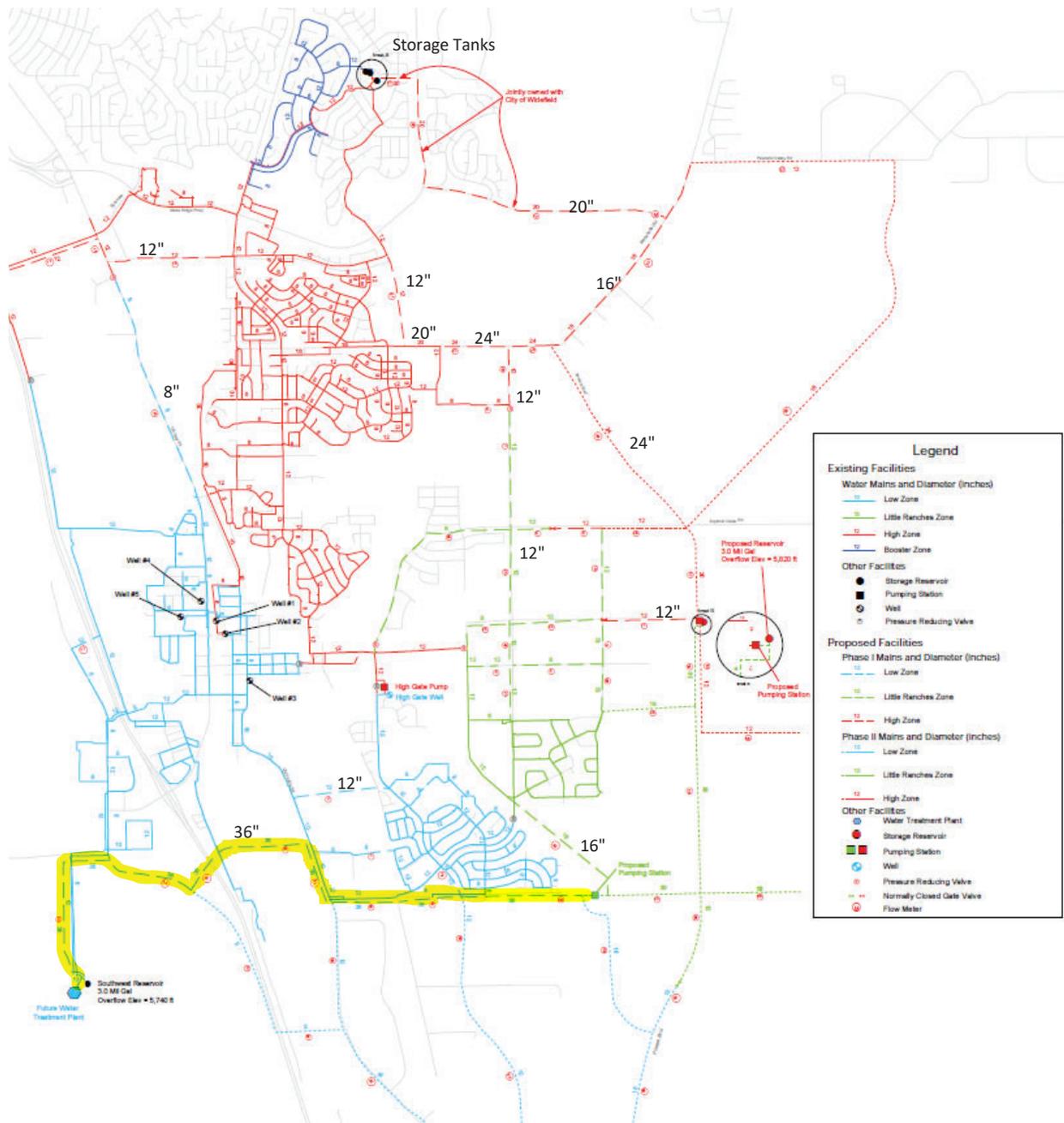


Figure 7. Recommended Distribution System Improvements
Excerpt from 2006 Water Master Plan, Figure 7-1
 Annotations added by Wright Water Engineers, Inc.

City of Fountain Water System Capacity Evaluation

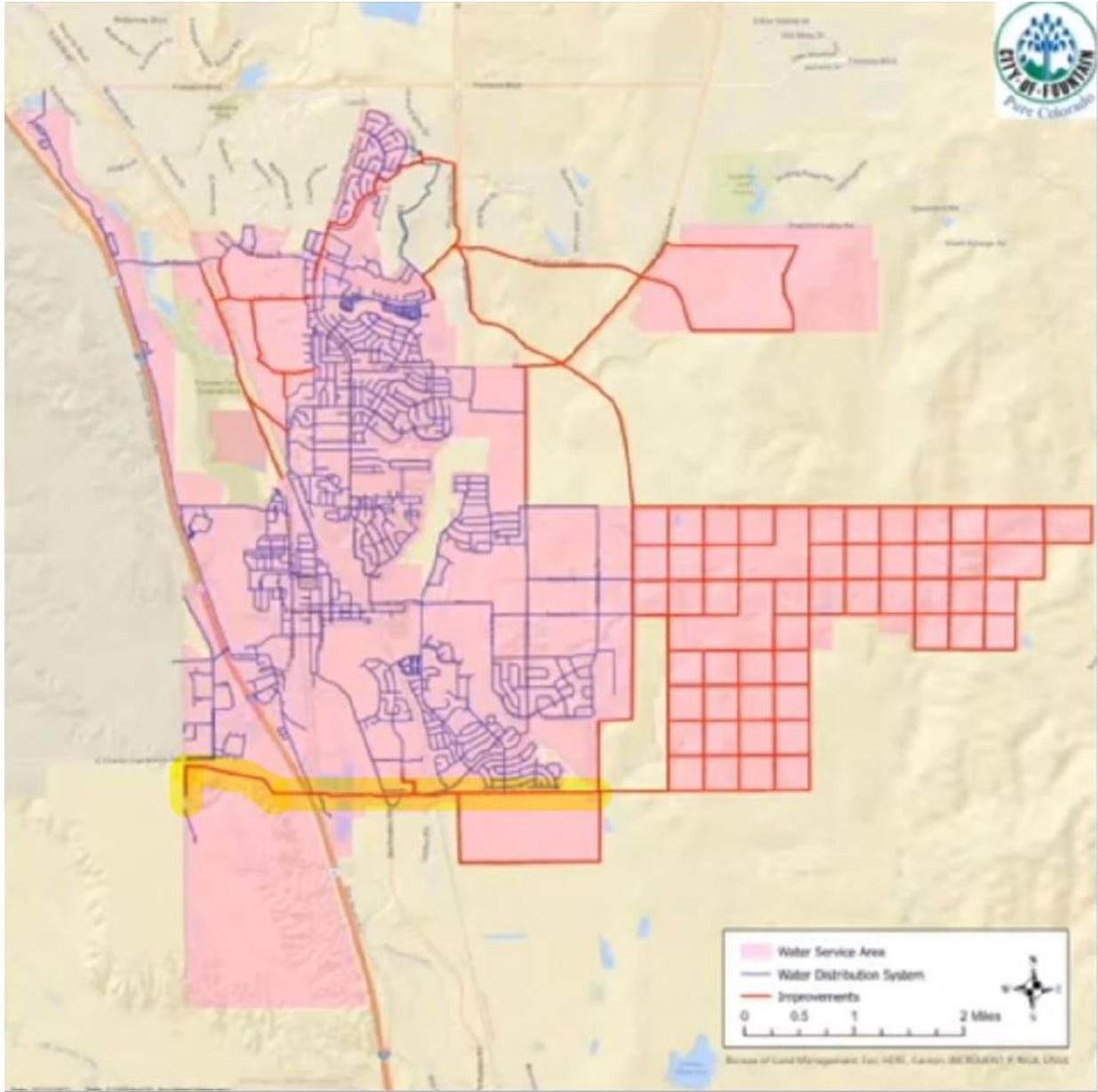


Figure 8. City of Fountain Water System Improvements
(Screenshot of PowerPoint October 26, 2021 Public Presentation. Highlight annotation added by WWE)

5.0 TREATED WATER CAPACITY

In addition to limitations in water delivery capacity, the most critical limitation is the water treatment capacity. The *2021 Master Plan* states:

“On an Annual Basis, the Treated Water Supply can satisfy the current Annual Demand and the current Peak Day Demand. However, Fountain is approaching the ceiling on the Treated Water Supply to satisfy the Maximum Daily Demand. The Daily Demand delivering these production rates would be 15 Acre Feet (4.9 MGD). Currently, the Average Daily Demand is about 2.6 MGD, which means that Fountain is approaching the current Treatment Capacity. Fountain has experienced Peak Daily Demands of 5+ MGD.”

The water treatment facilities include the FVA water treatment plant and the two Fountain owned granulated activated carbon (GAC) treatment plants. An ion exchange treatment facility is expected to be on-line in 2022 thus freeing up the two GAC water treatment units that could be used to treat additional well water (October 26, 2021, public presentation). Nevertheless, the above statement indicates a water treatment capacity of 4.9 MGD, less than the MDD of 5.32 MGD.

The *2021 Master Plan* states: “Fountain is approaching the limit of the Water System to adequately supply Treated Water to meet Maximum Daily Demand. [...] Satisfying this demand requires planning for new Water Treatment.” The Plan proposes five options for water treatment projects including:

1. *Design and construct a direct connection to Colorado Springs Utilities water network*
2. *Design and construct the Fountain Reservoir and a surface water treatment facility at the reservoir site*
3. *Water treatment facility developed cooperatively with peer utilities [Widefield Aquifer Recharge Association (WARA)]*
4. *Participate in the “Loop” plan (treating surface water diverted from Fountain Creek through the Chilcott Ditch and then pumping to participating utilities)*
5. *Development of additional ground water wells and associated treatment*

The Fountain Reservoir project (Number 2 above) was analyzed in the *2007 Master Plan* with estimated costs for developing 1,700 AF of storage. The design and construction were noted in years 2012 through 2015. The LaFarge property was purchased in 2008 but other implementation steps apparently were not taken.

The *2021 Master Plan* notes that “it will take time, probably years, from inception to completion” for whichever treatment option is selected. Currently, with a treatment capacity of 4.9 MGD and a year 2020 MDD of 5.32 cfs, Fountain’s ability to meet demand is severely limited by its ability to increase treatment capacity. A comparison of current treatment capacity with projected future MDD under the three development scenarios is presented in Figure 9.

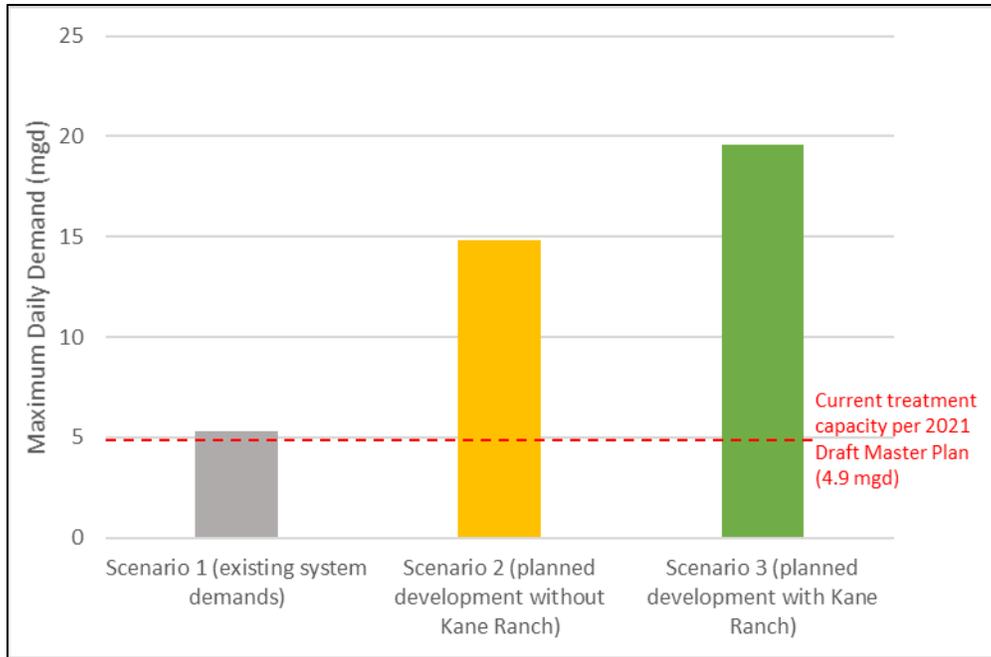


Figure 9. Current Treatment Capacity and Projected Maximum Daily Demands

6.0 TREATED WATER STORAGE

There are 5 treated (finished) water storage tanks with a total volume of 8 MG. As described above, the installation of the transmission pipeline from the 3 MG Southwest Tank is needed to convey water to existing customers and to the projected growth areas. The 2021 Master Plan does not detail specific treated water storage needs but states that such storage may be necessary for future developments. The 2007 Master Plan included a recommendation for the installation of a 3 MG tank along the west boundary of Kane Ranch.

7.0 TIMING

In order to provide safe and reliable water supply to a growing customer base, Fountain will need to increase its treatment and delivery capacity, raw water storage and water rights, all of which require time and funding. For the purposes of this discussion on timing, it has been assumed that the requisite funding is available. However, if this is not the case additional time will be required to obtain necessary financing before improvements to the system can be made. It should also be noted that estimates on timing are dependent many factors, including planning, permitting, design, and construction, all of which can encounter unforeseen challenges and delays. WVE has provided an estimated range of timeframes necessary to implement water system infrastructure and resources improvements in Table 5, although the true time could be even longer.

Table 5. Estimated Timeline for System Improvements

Required Improvement	Estimated Timeline
Water Treatment Capacity	3 to 8 years
Well & Delivery Infrastructure	3- 5 years to complete
Water Storage	6-10 years to complete
Water Resources	8 -10 years to purchase and obtain water court approval

In order to increase their water resource portfolio (which includes water rights and contractual supplies), Fountain will need to acquire new water supplies and the water court process to change water rights for new uses or places of use is a lengthy process. The design, permitting and review by regulatory authorities for infrastructure improvements can take several years before construction can even begin. As discussed previously, the *2021 Master Plan* included a discussion of 5 potential water treatment projects, which range from building infrastructure to directly connect the Colorado Springs Utilities water network to Fountain (which would enable increased deliveries of SDS treated water), constructing a treatment facility with other peer utilities, or developing additional groundwater wells and associated local treatment. Any of these options would require significant time and investment (on the order of 3 to 8 years, or more).

8.0 CONCLUSIONS

The previous sections have covered the various water system components. Table 6 is a summary of the water system demands by scenario along with the total for the three scenarios. The required water system capacity specific to each scenario for the various system components is also included. The infrastructure or water resources capacity that is needed for each scenario is shown in red font.

As can be seen in Table 6 for Scenario 1, the maximum day demand of 5.32 MGD (Row 5) exceeds the water treatment capacity of 4.9 MGD (Row 10). Fountain is apparently meeting its maximum day demands by drawing down its treated water storage. Water treatment capacity is the most critical limitation of the Fountain system. In order to meet projected demand for Scenario 2, an additional water treatment capacity of 9.9 MGD is required (Row 10).

The existing water delivery and well delivery capacity is 5.85 MGD (Row 9), about 10 percent higher than the maximum day demand.

The existing raw water storage can serve 1.5 times the existing customer base or approximately 14,700 taps. Once this has been exceeded, additional raw water storage will be required, approximately 6,500 AF for Scenario 2 and 5,600 AF for Scenario 3. Fountain appears to have the water rights portfolio to support up to 2 times the existing customer base, or approximately 19,000 taps. Once this has been exceeded, water rights on both the Arkansas River and Fountain Creek will be required, approximately 2,000 AF for Scenario 2 (Row 7) and an additional 1,500 AF for Kane Ranch (water rights purchases are most often acquired on the basis on consumable use).

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Table 6. Summary of Water Demands, Infrastructure, and Water Resources
Values in red font are additional needs

Row	Parameter	Scenario 1	Scenario 2	Scenario 3	Total
		Existing 2020	Other	Kane Ranch	
1	Annual Water Demand Volume, AF	3,137	5,589	2,801	11,527
2	Annual Water Demand Volume, MG	1,022	1,821	912	3,755
3	Estimated Number of Taps	9,803	17,466	8,753	36,022
4	Average Day Demand, MGD	2.8	5.0	2.5	10.3
5	Maximum Day Demand, MGD	5.32	9.48	4.75	19.55
6	Dry Year Physical Water Delivery, AF	5,341	3,147	3,056	11,544
7	Dry Year Consumable Water Rights, AF	2,932	1,968	1,528	6,427
8	Raw Water Storage, AF	11,000	6,500	5,600	23,100
9	Well & Delivery, MGD	5.85	8.95	4.75	19.55
10	Water Treatment Capacity, MGD	4.9	9.9	4.75	19.55

Row Footnotes:

- 1 The annual water demand in acre-feet (AF) from *2021 Master Plan*, Black & Veatch Tables 3-4, 3-5 and 3-6.
- 2 The annual water demand volume in million gallons (MG) is equal to (Row 1 AF)/(3.07 AF per MG).
- 3 The estimated number of equivalent taps is Row 1 divided by an annual use of 0.32 AF per tap. The 0.32 AF per tap value is a weighted unit water use based upon 30% residential units with a rate of 0.28 AF per unit and 70% Planned Unit Development (PUD) units with a rate of 0.34 AF per unit giving a weighted annual use of 0.32 AF per tap.
- 4 The average day demand (ADD) in MGD is equal to Row 2 MG/365 days per year.
- 5 The maximum day demand (MDD) is the ADD in Row 4 multiplied by 1.9, the system peaking factor.
- 6 & 7 The existing physical water and consumable water available in a dry year with severe reduction in the Colorado River deliveries is given in the *2021 Master Plan* Water Supply Table 9. The Scenario 2 and 3 water delivery and water rights needed to meet demands are outlined in the water rights matrix Table 4 herein.
- 8 Raw water storage is typically untreated (raw) water stored in an uncovered reservoir created by the construction of a dam, by excavation of earth, or a combination of both. In average or wet years, there can be water supplies in excess of the water demand. With water storage contracts or storage rights, excess water can be stored and carried over for use in a dry year. The *2021 Master Plan* outlines water storage requirements with the amount of storage not to be less than twice the annual water demand. As an example, the total existing and 'Other Properties' water demand is 8,726 AF (3,137 AF + 5,589 AF) giving a total raw water storage volume of 17,500 AF (rounded figure). The existing storage volume is approximately 11,000 AF with a resulting additional raw water storage volume of 6,500 AF for the "Other properties." The Kane Ranch would require an additional 5,600 AF of raw water storage.
- 9 A municipal water supply should have the capacity to deliver and treat the MDD. The existing delivery capacity of treated water from the FVA (1.785 MGD) and the SDS-FVA Trade carried in the FVA (2.765 MGD) totals 4.55 MGD and the water delivery capacity from the treated water storage tanks is also 4.55 MGD [Goldfield (North) Tanks 3.25 MGD and Southwest Tank 1.3 MGD]. The reported delivery capacity from the four Fountain wells is cited in the *2021 Master Plan* as 1.3 MGD. Together, the delivery capacity from FVA and the wells is 5.85 MGD, 0.53 MGD above the 2020 existing demand. For the "Other Properties," the additional water delivery capacity required is 8.95 MGD (MDD of 9.48 MGD - 0.53 MGD). The Kane additional delivery capacity needed is the MDD of 4.75 MGD.
- 10 The total water treatment capacity cited in the *2021 Master Plan* is 4.9 MGD, which is less than the 2020 MDD of 5.32 MGD. To meet the 2020 MDD shortfall of 0.42 MGD, the treated water storage tanks were apparently relied upon. The "Other Properties" water treatment capacity needed is 9.9 MGD (MDD of 9.48 + 0.42 MGD) and 4.75 MGD for Kane Ranch.

The following concerns related to current capacity limitations are apparent from the recommendations provided in the *2007 Master Plan*, the *2021 Master Plan*, annexed growth

City of Fountain Water System Capacity Evaluation

potential, and general observations and reviews of the public presentations to the City Council. The concerns include:

- Recommendations found in the *2007 Master Plan* have not been implemented. Executing an accelerated program to build out the necessary infrastructure to support short term growth (within the next five years) would appear to be challenging from both a construction timeline as well as financing of the projects. The *2021 Master Plan* even notes that “it will take time, probably years, from inception to completion” for delivering treatment options.
- Projected demands under the three scenarios present significant challenges to meet these demands, even without the Kane Ranch development, in a reasonable and timely manner. Figures 4, 5, and 6 in this report clearly indicate that future planned development is significantly challenged.
- Fountain lacks the foundational background of a current water rate study to forecast or plan for any near term incremental growth.

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**Appendix A. Table of Fountain Water
Rights (Table 6 from *2021 Master Plan*)**

**Table 6
City of Fountain Water Rights Yield**

	A Water Right	B Water Court Case No.	C D E Annual Yield (acre-feet)		
			Dry Year	Average Year	Wet Year
	1st Use Water Rights				
1	Fryingpan-Arkansas Project Water 1st Use	85CW110	1,266.0	1,266.0	1,900.0
2	Stubbs and Miller Ditch	W-4396 and W-4559	100.0	100.0	100.0
	Total 1st-Use Rights		1,366.0	1,366.0	2,000.0
	Fully-Consumable Rights				
3	Fryingpan-Arkansas Project Return Flows	85CW110	880.6	880.6	1,321.5
4	221 Fountain Mutual Irrigation Company Shares	W-4396 and W-4559	154.7	154.7	221.0
5	137 Fountain Mutual Irrigation Company Shares	85CW110	95.9	95.9	137.0
6	190 Fountain Mutual Irrigation Company Shares	01CW146	133.0	133.0	190.0
7	92 Fountain Mutual Irrigation Company Shares	19CW3082 (pending)	64.4	64.4	92.0
8	Little Fountain Pipeline (Keeton Reservoir)	W-4396 and W-4559	78.0	160.0	229.0
9	512.5 Colorado Canal Company Shares	84CW62, 84CW63, and 84CW64	0.0	208.0	483.0
10	Miller Ditch	08CW114	285.0	285.0	392.0
11	10.25 Chilcott Ditch Shares	09CW103	213.0	252.3	382.1
12	15.50 Chilcott Ditch Shares	10CW99	322.1	381.5	577.8
13	Crabb Ditch	08CW115	35.2	35.2	52.8
14	Fountain Creek Priority No. 4	N/A			
15	2.125 cfs Fountain Creek Priority No. 17	19CW3081 (pending)			
16	2.125 cfs Fountain Creek Priority No. 17	N/A			
17	W. A. Bell Ditches	08CW47	0.0	228.5	315.0
18	Dr. Rogers Ditch	15CW3068	170.4	170.4	349.7
19	Super Ditch Current Leased Deliveries	N/A	500.0	500.0	500.0
20	Total Fully-Consumable Rights		2,932.3	3,549.5	5,242.9

Column Notes:

- A In addition to the listed water rights, the City operates decreed and undecreed wells to supply water to its customers.
- B Water Court decrees for the changes of water rights and augmentation plans authorizing the City's use of the listed water rights.
- C Net annual volume (after deducting historical return flow obligations) available to Fountain during a typical dry year, based on historical records.
- D Net annual volume (after deducting historical return flow obligations) available to Fountain during an average year, based on historical records.
- E Net annual volume (after deducting historical return flow obligations) available to Fountain during a typical wet year, based on historical records.

Row Notes:

- 1 For the Fry-Ark Project, limitations of the Western Slope water rights cause the average annual yield to be roughly two-thirds of the 2,000 acre-feet per year delivered through the Fountain Valley Authority capacity in the Fountain Valey Conduit, for an actual yield of about 1,333 acre-feet per year. After five percent transmission and treatment loss, the net delivery of Fry-Ark Project water for Fountain's first use is approximately 1,266 acre-feet per year. The return flows from this source are considered to be fully-consumable supplies described in No. 3 below. Due to Fry-Ark Project storage in Pueblo Reservoir, the average annual delivery of 1,266 acre-feet per year can be achieved in dry years.
- 2 Pursuant to decree in Case Nos. W-4396 and W-4559, Fountain can pump up to 100 acre-feet per year from its wells under these water rights.
- 3 Calculated based on dry year, average year, and wet year deliveries in Row No. 1 above and the replacement percentages decreed in Case No. 85CW110.
- 4-7 Recent changes of FMIC shares, including the decree in Case No. 01CW146 and the proposed decree in Case No. 19CW3082, have limited the 20-year total credit to 14 acre-feet per share, or 0.70 acre-feet per year per share, and the maximum annual credit to 1.00 acre-feet per share. Due to FMIC's storage in Big Johnson Reservoir for FMIC shares, the average annual yield of 0.70 acre-feet per share can be achieved in dry years.
- 8 There have been no Little Fountain Pipeline deliveries since 2015. Average year yield is based on the 2002-2014 deliveries, dry year yield is based on the 2002 deliveries, and wet year yield is based on the 2005 deliveries.
- 9 The average annual Colorado Canal yield was previously estimated by Wheeler and confirmed by actual deliveries to Fountain (at Pueblo Reservoir) during 2016-2020. The wet year delivery is based on the 2016 delivery to Fountain. There can be no deliveries in a dry years due to the junior nature of the Colorado Canal water right, even though there is 342 acre-feet of storage available in the Colorado Canal system. For example, there were no deliveries during 2018.

- 10 The decrees in Case No. 03CW59 and Case No. 08CW114 limit the 10-year consumptive use credit to 285 acre-feet per year and the maximum annual credit to 392 acre-feet per year. The average annual yield of 285 acre-feet per year can be achieved during a dry year.
- 11-12 The decrees in Case No. 06CW119, Case No. 09CW103 and Case No. 10CW99 limit the net consumptive use credits (irrigation season credits less non-irrigation season return flow obligations) to an average of 24.61 acre-feet per year and the maximum annual net credits to 37.28 acre-feet per share. Based on Fountain's 2012 water rights accounting, the net credits are reduced to approximately 20.78 acre-feet per share during a typical dry year.
- 13 The decree in Case No. 08CW115 limits the 10-year average consumptive use credit to 35.2 acre-feet per year and the maximum annual consumptive use credit to 52.8 acre-feet per year. There are no return flow obligations during the non-irrigation season. Based on historical diversion records and Fountain's 2020 accounting records, the average annual yield of 35.2 acre-feet per year can be achieved during a typical dry year.
- 14-16 This analysis for Fountain's 2021 Master plan has conservatively excluded any potential yield associated with Fountain's Priority Nos. 4 and 17 water rights due to uncertainties associated with changes of these water rights.
- 17 The decree in Case No. 08CW47 limit the net consumptive use credits (irrigation season credits minus non-irrigation season return flow obligations) to an average of 239.3 acre-feet per year and the maximum annual net credit to 329.8 acre-feet per year. These amounts were reduced by transit losses to Pueblo Reservoir of approximately 4.5 percent, which is the transit loss percentage presently assessed by the Division Engineer's Office, for a net average credit of 228.5 acre-feet per year and maximum annual credit of 315.0 acre-feet per year at Pueblo Reservoir. There are no credits available during dry years due to low flows on Venable Creek and Alvarado Creek.
- 18 The decree in Case No. 15CW3068 limits the net consumptive use credits (irrigation season credits minus non-irrigation season return flow obligations) to an average of 170.4 acre-feet per year and the maximum annual net credit to 349.7 acre-feet per year. Based on review of historical diversion records, the average annual yield can be achieved in dry years.
- 19 Fountain presently leases 500 acre-feet per year of fully-consumable water delivered at Pueblo Reservoir. This amount can be increased over time according to the schedule in the October 2018 amended and restated water lease between Lower Arkansas Valley Super Ditch Company and Fountain. The maximum leased amount is 3,800 acre-feet per year, which would be available by year 2046.
- 20 This row represents the total volume of fully-consumable supplies available for Fountain's initial use. As described in Table Nos. 7, 8, and 9, the physical water deliveries that can be achieved with the fully-consumable supplies exceed these totals, since the return flows are available for successive use to extinction.

[https://www.wheeler-my.sharepoint.com/personal/matt_loose_www.wheeler_com/Documents/0603.00-2021 Master Plan/\[Fountain Water Supply Yield Analysis-2021-09.xlsx\]WRs Yield](https://www.wheeler-my.sharepoint.com/personal/matt_loose_www.wheeler_com/Documents/0603.00-2021%20Master%20Plan/[Fountain%20Water%20Supply%20Yield%20Analysis-2021-09.xlsx]WRs%20Yield)

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