

SECURITY WATER DISTRICT

Water Resources Report

PREPARED FOR
SECURITY WATER DISTRICT



Updated June 23, 2025



June 23, 2025

Mr. Roy Heald, General Manager
Security Water and Sanitation Districts
231 Security Blvd.
Colorado Springs, CO 80911

RE: #1122 – Security Water District Water Resources Report

Dear Roy:

Attached is our report entitled, *Security Water District Water Resources Report, Updated June 23, 2025*. This report includes an updated summary of the water rights and water supplies available to Security Water District, together with information concerning the current and anticipated future water demands.

Please contact us if you have any questions or comments.

Sincerely,
W. W. Wheeler & Associates, Inc.

Matthew J. Loose, P.E.

encl.

TABLE OF CONTENTS

TABLE OF CONTENTS	1
1.0 INTRODUCTION.....	1
2.0 WELLS IN THE WIDEFIELD AND WINDMILL GULCH AQUIFERS	3
2.1 Widefield Aquifer General	3
2.2 Widefield Aquifer Stipulation.....	4
2.3 Security's Wells in the Widefield Aquifer	5
2.4 Perpetual Lease of Venetucci Wells in the Widefield Aquifer	7
2.5 Lease of Clear Springs Ranch Wells in the Widefield Aquifer	7
2.6 Security's Wells in the Windmill Gulch Aquifer	8
3.0 FRY-ARK PROJECT WATER AND RETURN FLOWS	9
3.1 Fry-Ark Project Return Flows	9
3.2 Fry-Ark Project Storage Capacity	10
4.0 SECURITY'S FULLY CONSUMABLE WATER SOURCES	12
5.0 SOUTHERN DELIVERY SYSTEM AND PUEBLO RESERVOIR STORAGE CAPACITY	16
5.1 SDS Project Storage Capacity in Pueblo Reservoir	16
5.2 Southeastern District Master Contract Storage Capacity in Pueblo Reservoir	16
5.3 Operation of Pueblo Reservoir Storage Capacity	17
5.4 Deliveries through Colorado Springs Interconnection	17
6.0 WIDEFIELD AQUIFER RECHARGE PROJECT	19
7.0 WATER SYSTEM YIELD.....	20
8.0 WATER QUALITY	22
9.0 SECURITY WATER DEMAND	23
10.0 AVAILABILITY OF WATER TO SUPPORT ADDITIONAL DEMANDS.....	24
11.0 SUMMARY AND CONCLUSIONS	26

FIGURES

FIGURE 1 SECURITY WATER RESOURCES VICINITY MAP

TABLES

TABLE 1 WELLS USED IN SECURITY'S WATER SYSTEM

TABLE 2 SECURITY FULLY CONSUMABLE WATER SOURCES

TABLE 3	SECURITY CURRENT AND NEAR-TERM FUTURE WATER SYSTEM YIELD
TABLE 4	SECURITY TOTAL HISTORICAL WATER DEMAND
TABLE 5	SECURITY WATER DEMAND COMMITMENTS AND PROJECTIONS

1.0 INTRODUCTION

The purpose of this report is to provide an updated summary of the water rights and water supplies available to Security Water District (Security), together with information concerning the current and anticipated future water demands. This report is updated from the previous Water Resources Report dated March 17, 2021.

Security's water system presently provides a reliable municipal water supply for a population of approximately 20,000 in the service area shown on Figure No. 1. Security obtains its physical water supply from numerous wells located in the vicinity of its service area, supplemented by Fryingpan-Arkansas (Fry-Ark) Project water stored in Pueblo Reservoir and delivered to Security through the Fountain Valley Conduit and Southern Delivery System. Security also obtains its water supply from other fully consumable water sources delivered from Pueblo Reservoir to Security through the Fountain Valley Conduit.

During 2016 through 2020, Security relied entirely on surface water supplies delivered from Pueblo Reservoir and on purchased deliveries from an interconnection with Colorado Springs Utilities' distribution system. This exclusive use of surface water supplies occurred because Security's wells exceeded the lifetime health advisory levels set by the United States Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) for Perfluoroalkyl substances (PFASs). The water treatment facility for Security's wells came online in 2021, at which time Security resumed operation of its wells.

Security's water rights include a complex system of decrees, well permits, and agreements. For the purposes of this report, the water rights used by Security have been divided into four separate groups:

1. The wells drilled into the Widefield Aquifer and the Windmill Gulch Aquifer.
2. Fry-Ark Project water and return flows from this source of supply.
3. The other fully consumable water sources used for augmentation purposes to replace out-of-priority well depletions and to support deliveries from Pueblo

Reservoir through the Fountain Valley Conduit (in excess of Fry-Ark Project water deliveries).

Security's water supply system is continually expanded and improved to (1) provide additional capacity in anticipation of growth within the water service area and (2) maintain redundancy and reliability of physical deliveries to Security's distribution system. Such redundancy and reliability are necessary to protect against climate change and potential infrastructure issues. Security has embarked on numerous projects over the past several years to ensure adequate water supplies for its customers. Recent projects include the following:

1. Development of additional water supplies in the Widefield Aquifer, particularly including upgrading of the Clear Springs wells and implementation of a 25-year lease through year 2037, and a perpetual lease for 45 percent of the water rights and production capacity of the Venetucci Wells.
2. Purchase and change of Fountain Mutual Irrigation Company, Lock Ditch, and Chilcott Ditch senior water rights along Fountain Creek.
3. Purchase and change of the Hayden Ranch water rights in Fremont County.
4. Completion of the Southern Delivery System in cooperation with Colorado Springs Utilities, the City of Fountain, and Pueblo West Metropolitan District.
5. Acquisition of Long-Term Excess Capacity storage contracts at Pueblo Reservoir to provide additional reliability in Security's water supply through the Fountain Valley Conduit and Southern Delivery System.
6. Entering into an agreement with Colorado Springs Utilities to receive deliveries from Pueblo Reservoir through interconnection with Colorado Springs Utilities' distribution system.
7. Participation in the planned Widefield Aquifer recharge project in cooperation with Widefield Water and Sanitation District and the City of Fountain.

2.0 WELLS IN THE WIDEFIELD AND WINDMILL GULCH AQUIFERS

Background information on Security's wells in the Widefield Aquifer and the Windmill Gulch Aquifer and the replacement sources used for operation of those wells is provided below. The attached Figure No. 1 is a map showing the locations of Security's service area and pertinent water supply facilities. A summary of the wells owned or leased by Security and the allowable pumping rates are presented in the attached Table No. 1. All of the wells have water rights decrees and well permits and are included within adjudicated augmentation plans, which evidence Security's ability to operate the wells in the future. The wells may be re-drilled, if necessary, or rehabilitated at any time to put the wells into service or to restore their production capacities.

The wells in the Widefield and Windmill Gulch aquifers pump water that is considered to be tributary to Fountain Creek and the Arkansas River Basin. The Colorado Division of Water Resources strictly administers Security's wells to ensure that water is pumped only in accordance with Security's decreed augmentation plans. Because of the over-appropriated nature of water rights within the Arkansas River Basin, the junior rights associated with the wells used by Security are almost never in priority. Therefore, the Security augmentation plans provide replacement water on a year-round basis to ensure that all depletions are replaced.

Security does not currently obtain any water supplies from bedrock wells that are classified as 'nontributary' or completed to Denver Basin formations. All of the water supply is obtained from annually renewable and perpetual sources, so the '300-year' quantity of water described in El Paso County regulations is not an applicable concept for evaluation of Security's water supply.

2.1 Widefield Aquifer General

Most of the wells used by Security are in a geographical area known as the Widefield Aquifer. The Widefield Aquifer is an important source of water supply for municipal and agricultural water users in the southern portion of the Colorado Springs metropolitan area. The Widefield Aquifer includes an area about five miles in length and about two-thirds of

a mile in width, generally located on the eastern side of Fountain Creek. The aquifer is generally bounded by Sand Creek on the north and the El Paso County Regional Park on the south. The aquifer area includes a total of about 3.5 square miles.

The aquifer is an old buried channel of Fountain Creek, deeply eroded into the bedrock shale. The alluvial fill consists of sand, gravel, cobbles, and only minor amounts of clay. A maximum alluvial depth of about 100 feet occurs in the Security and Widefield area where the best wells are located. USGS reports transmissivity values of up to 200,000 gpd/ft. Municipal wells in the central part of the aquifer produce sustainable flows of over 600 gpm.

The Widefield Aquifer is separated from Fountain Creek by a buried shale ridge, except in a few limited locations. Although the aquifer has ideal characteristics for well operations, large capacity wells can locally deplete the aquifer, if many of them are pumped at the same time. In a 1985 inflow-outflow study by the USGS, it was estimated that the total inflow to the aquifer is roughly 12,000 acre-feet per year, with by far the largest source of inflow occurring at the upstream end of the aquifer. Outflows include groundwater pumping, outflow to Fountain Creek at the southern end of the aquifer, and limited outflows across the shale ridge during times when the aquifer is full. Outflows generally balance with inflows on an annual basis.

2.2 Widefield Aquifer Stipulation

The Widefield Aquifer stipulation was developed in 1977 to provide a framework for engineering management of the aquifer. The stipulation, also known as the "Widefield Aquifer Management Agreement," was approved by the Water Court in Water Division 2 in 1977 (Case No. W-116), and updated and re-approved in 2009. In June 2025, the participants are updating the stipulation to extend it for an additional 20 years.

Under the stipulation, the aquifer is managed to ensure that over-pumping does not occur and to ensure that the aquifer is adequately replenished each year, thereby maintaining appropriate water levels for all municipal water users in perpetuity. Participants in the stipulation include Security, Widefield Water and Sanitation District, Colorado Springs Utilities, Stratmoor Hills Water District, and El Paso County Parks Department. As the

basis of the stipulation, a computer model was developed by Wheeler, based on consultation with Dr. Robert Glover (former Colorado State University professor), to simulate operations of the aquifer. The model accounts for aquifer inflows and outflows, using extensive well pumping and water level data compiled by the U.S. Geological Survey and water users. The model was then calibrated with observed conditions. Under the stipulation, the participants agreed to an allocation system whereby each water user was assigned annual and seasonal pumping limitations based on the sustainable yield of the aquifer through established reaches of the aquifer. The participants also agreed to refrain from asserting well priorities against each other.

It is noted that the stipulation deals with pumping allocations among the parties to ensure that over-pumping within the aquifer does not occur. Each participant, however, must operate its wells in a way that does not cause injury to other water users in the Fountain Creek and Arkansas River basins. Wells must be operated in accordance with the Arkansas River Basin Rules and Regulations and/or in accordance with decreed augmentation plans. Accordingly, Security uses its decreed augmentation sources to replace depletions associated with operation of its wells in the Widefield Aquifer.

2.3 Security's Wells in the Widefield Aquifer

Security's wells in the Widefield Aquifer originally consisted of 15 wells that were decreed in Case No. W-112. Three additional Security wells (S-18, S-19, and S-20) were decreed in Case No. 90CW28 as alternate diversion points for the original Sproul wells. The following additional wells and water rights have been acquired by Security and changed to allow municipal use. This list excludes the Venetucci Wells and Clear Springs Wells, which are leased by Security and discussed in Sections 2.4 and 2.5.

Ream Wells	Case No. W-4766 and 90CW28
Fountain Valley School Well No. 4	Case No. 90CW28
Camden Well No. 1	Case No. 01CW149
Bender Wells	Case No. 09CW92

Under the terms of the restated Widefield Aquifer stipulation, diversions by Security's wells are limited to specific volumetric amounts, as summarized below. These limits include the

Security Wells, Ream Wells, Fountain Valley School Well, the Camden Well, and the Bender Wells water rights.

Maximum month	377 acre-feet
Maximum over four consecutive months	1,285 acre-feet
Annual maximum	2,343 acre-feet

In 1987, the parties to the Widefield Aquifer stipulation agreed to a ten percent increase in the pumping allocations, but this additional pumping allocation is subject to removal if ongoing experience with operation of the aquifer indicates that pumping is causing excessive stress to aquifer water levels. This pumping increase is considered a component of Security's present water supply, as it has been in effect for over 30 years and continues to be in effect at this time. Future experience with operation of the aquifer may indicate that the increase must be eliminated. Therefore, it is unknown whether the 10 percent allocation increase will continue to be available to Security in the long-term future. With the 10 percent increase, the allowable Widefield Aquifer pumping is equal to the following amounts:

Maximum month	415 acre-feet
Maximum over four consecutive months	1,414 acre-feet
Annual maximum	2,577 acre-feet

Upon future construction of facilities by Security for artificial recharge of the Widefield Aquifer, the volumetric limits will be increased in accordance with the stipulation:

Maximum month	496 acre-feet
Maximum over four consecutive months	1,579 acre-feet
Annual maximum	3,068 acre-feet

Security also obtained a decree in Water Court Case No. 12CW99 for continued operation of the Clear Springs wells. These wells are owned by Colorado Springs Utilities and leased by Security. Therefore, in addition to the pumping amounts described above, Security is also entitled to pump up to 600 acre-feet per year from the Clear Springs wells.

Maximum month	375 acre-feet
Maximum over four consecutive months	600 acre-feet
Annual maximum	600 acre-feet

2.4 Perpetual Lease of Venetucci Wells in the Widefield Aquifer

Pursuant to a perpetual lease agreement dated December 15, 2006, the Pikes Peak Community Foundation leased the Venetucci Wells and water rights to Security and to Widefield Water and Sanitation District. Security and Widefield also entered into an agreement dated December 15, 2006 with the City of Fountain to sublease a portion of the water delivered under the Venetucci Wells to the City of Fountain. The water is allocated as follows, excluding the 500 acre-feet per year retained by the Pikes Peak Community Foundation for its own onsite irrigation:

Entity	Allocation (percent)
Security	45%
Widefield	45%
Fountain	10%

Security is allocated at least 596 acre-feet per year from the Venetucci Wells, without considering the 10 percent increase in pumping allocations from the Widefield Aquifer stipulation. All facilities required for delivery of this water to Security have been constructed.

Under the agreements, Security may receive additional deliveries above its respective allocation if Widefield or Fountain do not take their full amount. Venetucci Wells V-4, V-5, V-7, and V-8 are useable for municipal water supply by Security, Widefield, and Fountain, but these entities can also obtain supplies from Venetucci Wells V-1, V-2, and V-3, if needed, to maximize the yield of all of the wells in accordance with the provisions of the Widefield Aquifer Stipulation.

2.5 Lease of Clear Springs Ranch Wells in the Widefield Aquifer

The Clear Springs wells have been used by Security for more than 60 years pursuant to leases with Colorado Springs Utilities and its predecessors. This pumping has been limited to 600 acre-feet per year. Under the current lease, dated December 12, 2012, Security's use of the water will continue for an additional term of 25 years, expiring on December 31, 2037, with further renewals of the lease possible thereafter if agreed to by the parties at that

time. Under the current lease, water to replace well depletions is provided by Security. Replacement is provided under Security's augmentation plan decreed in Case No. 12CW99.

2.6 Security's Wells in the Windmill Gulch Aquifer

In the Windmill Gulch Aquifer, located east of the Widefield Aquifer, Security owns five wells, W-8 through W-12, which were originally decreed in Case No. W-400. Pursuant to an agreement with Widefield Water and Sanitation District, Widefield supports annual pumping of 200 acre-feet per year under its augmentation plans. Any pumping in excess of 200 acre-feet per year is covered by Security's augmentation plan. The Water Court determined in 1989 (Case No. 81CW229) that pumping at the Windmill Gulch Wells has a minimal effect on water supplies in the Widefield Aquifer, thereby excluding the wells from the Widefield Aquifer stipulation. For planning purposes, the reliable yield of the Windmill Gulch Wells is estimated to be 240 acre-feet per year.

3.0 FRY-ARK PROJECT WATER AND RETURN FLOWS

The U.S. Bureau of Reclamation constructed the Fry-Ark Project for the purpose of providing supplemental water supplies to irrigation and municipal water users in the Arkansas River Basin. The primary source of water for the Fry-Ark Project is water that is diverted from various headwater tributaries of the Colorado River and delivered into the Arkansas River Basin. The Fountain Valley Authority was organized as an entity to be responsible for construction and operation of pump stations, the Fountain Valley Conduit, and a water treatment plant for delivery of Fry-Ark Project water from Pueblo Reservoir on the Arkansas River to municipal water users in the Colorado Springs area. Security is entitled to take delivery of 1,646 acre-feet per year of Fry-Ark Project water through the Fountain Valley Conduit, subject to availability of that much water produced by the Project and subject to payment of annual water delivery charges, storage charges, and conveyance and water treatment losses of about five percent. Therefore, the net volume of water deliverable to Security is estimated to be a maximum of about 1,564 acre-feet per year (1,646 acre-feet per year reduced by five percent).

Because of limitations of the Fry-Ark Project yield in drought years, an average of roughly 1,042 acre-feet per year delivered through the Fountain Valley Conduit (2/3 of the 1,564 acre-feet per year net delivery) is derived from Fry-Ark Project water stored in Pueblo Reservoir for Security. The remaining 521 acre-feet per year (1/3 of the 1,564 acre-feet per year net delivery) is supplied through the Fountain Valley Conduit from Security's other fully consumable sources stored in Pueblo Reservoir. This water is used directly in Security's water system for municipal purposes as a base-load supplemental supply.

3.1 Fry-Ark Project Return Flows

After municipal use of the Fry-Ark Project water by Security, a significant portion of the water returns to Fountain Creek in the form of treated sewage effluent and lawn irrigation return flows. Because the source of Fry-Ark Project water is almost entirely a transbasin diversion from the headwaters of the Colorado River Basin, the return flows to Fountain Creek from Fry-Ark Project deliveries constitute a new source of water to the stream system, and the return flows are available for reuse and as a replacement source in Security's augmentation

plans. More specifically, the Fry-Ark return flows are used to replace depletions associated with Security's out-of-priority pumping of wells in the Widefield Aquifer and Windmill Gulch Aquifer. Alternately, the Fry-Ark return flows are delivered to Security's Long-Term Excess Capacity Storage space in Pueblo Reservoir (discussed in Section 5.0 of this report) by exchange or by contract trade. Security was granted the right to annually purchase the return flows associated with its Fry-Ark Project water deliveries, under a perpetual contract. Security's decreed augmentation plan in Case No. 90CW28 set up a water accounting system that provided for the calculation of the Fry-Ark Project wastewater return flow volumes on a daily or weekly basis. Quantification of the lawn irrigation return flow volumes was decreed in Case No. 01CW149.

3.2 Fry-Ark Project Storage Capacity

The Fountain Valley Authority was granted storage space in Project facilities, notably including Pueblo Reservoir, to provide for storage of Fry-Ark Project water. Such storage is needed in order to regulate the supply to provide for year-round delivery of such Project water to the Fountain Valley Authority participants. Security's share of the Fountain Valley Authority's storage space at Pueblo Reservoir is 6,387 acre-feet, and this space can only be used for storage of Project water. This space is typically replenished each year with Project water to the extent that the Fountain Valley Authority's share of Fry-Ark Project deliveries can provide sufficient water to provide a complete refill. During drought years, when Fry-Ark diversions from the Western Slope are poor, only a relatively small amount of water is available pursuant to the Fountain Valley Authority's share of Fry-Ark Project deliveries. Replenishment of the storage accounts in such drought years can be inadequate to provide for a complete fill, resulting in year-to-year drawdowns of water within those accounts. Security's 6,387 acre-feet share of storage capacity at Pueblo Reservoir is therefore used to provide carry-over storage during years of extended drought, which is an important feature to ensure that the annual deliveries of Project water for Security's municipal use can continue during such critical periods.

As mentioned in Section 3.0, the Fry-Ark Project deliveries to Security's distribution system average approximately 1,042 acre-feet per year. This sustainable annual volume is constrained by the available Fry-Ark Project supplies for Security to store during drought

years, along with carry-over storage capacity in Pueblo Reservoir (6,387 acre-feet) for multiple years when such supplies are limited. The sustainable Fry-Ark Project deliveries to Security's distribution system are not controlled by the Fountain Valley Conduit delivery capacity (1,564 acre-feet per year net delivery).

4.0 SECURITY'S FULLY CONSUMABLE WATER SOURCES

A summary of the fully consumable water sources available to Security is presented in the attached Table No. 2, and each fully consumable source is described below. These sources are used for augmentation purposes to replace out-of-priority well depletions, to support deliveries through the Fountain Valley Conduit in excess of the Fry-Ark Project water deliveries, and to support deliveries through the Southern Delivery System. The augmentation sources available for use by Security total approximately 1,702 acre-feet per year. As further described below, this total excludes the available water supply attributable to Security's Fountain Creek Priority No. 4 water right.

Fountain Creek Priority No. 4. Security's augmentation plan in Case No. W-4212 permits the annual withdrawal of 2,000 acre-feet per year from wells in the Widefield Aquifer. The replacement source used in this augmentation plan is a portion of the Fountain Creek Priority No. 4 senior water right in the Fountain Mutual Ditch, totaling 481 acre-feet per year of consumptive use credit. The winter depletions associated with operation of the augmentation plan are replaced during January 1 through March 17 with 102 acre-feet of Fry-Ark Project return flows or consumptive use credits associated with Security's Fountain Mutual Irrigation Company shares. The Priority No. 4 water right is excluded from the total in Table No. 2 because the consumptive use credit is accounted for by the 2,000 acre-feet of well pumping authorized in Case No. W-4212, which is different from Security's other fully consumable supplies used to replace well depletions or provide deliveries from Pueblo Reservoir.

Fry-Ark Project Return Flows. As described in Section 3.1 above, Security was granted the right to annually purchase the return flows associated with its Fry-Ark Project deliveries. Security's decreed augmentation plan in Case No. 90CW28 includes a credit for sewered Fry-Ark Project return flows, to the extent that Security has purchased such return flow rights. Credit for the non-sewered portion of the Fry-Ark Project return flows was approved in Case No. 01CW149. The purchased Fry-Ark return flows are available for augmentation of Security's wells or for storage in Pueblo Reservoir.

Fountain Mutual Irrigation Company Shares. Security currently owns 723 shares of stock in the Fountain Mutual Irrigation Company (FMIC). The 723 shares of FMIC water represent an interest in a number of direct flow and storage water rights that have historically been used for irrigation of lands in the vicinity of Security's service area. The underlying water rights represented by 637 FMIC shares were changed by Security for municipal and augmentation uses in Case Nos. 90CW28, 01CW149, 07CW51, and 12CW99. The consumptive use credit associated with the 637 changed FMIC shares is available for augmentation of Security's wells or for storage in Big Johnson Reservoir and Pueblo Reservoir. The consumptive use credit for these shares averages 0.7 acre-foot per share, or a total of 446 acre-feet per year for Security's 637 changed shares.

In pending Case No. 23CW3039, Security has applied to change the remaining 86 FMIC shares for municipal and augmentation uses. The Water Court has approved changes of FMIC shares in numerous other cases, so approval of these shares under similar terms and conditions is anticipated, providing an average of 0.7 acre-foot per share or a total of 60.2 acre-feet per year for these 86 shares.

Water diverted pursuant to Security's changed FMIC shares is measured and discharged back to Fountain Creek at the Spring Creek and McRae augmentation stations. Ownership of these FMIC shares also entitles Security to use of a pro-rata portion of the storage capacity in Big Johnson Reservoir. Recent improvements to Big Johnson Reservoir have restored part of the reservoir capacity that had previously silted in, making the FMIC shares an increasingly reliable augmentation supply in all years.

Chilcott Ditch. Security currently owns 11.25 shares in the Chilcott Ditch Company, consisting of Fountain Creek Priorities 27 and 39. The decree in Case No. 06CW119 changed 10.25 shares for municipal and augmentation uses by Security, representing an average of 252 acre-feet per year of consumptive use credit available for augmentation purposes or delivery for storage in Pueblo Reservoir. Upon adjudication of a change of water rights and augmentation plan incorporating the additional share, the total consumptive use credit will increase to an average of 277 acre-feet per year. Water

diverted pursuant to Security's changed Chilcott Ditch shares is measured and discharged back to Fountain Creek at the Chilcott Ditch augmentation station.

Lock Ditch. Security adjudicated an augmentation plan in Case No. 06CW117 that includes an average of 159 acre-feet per year of consumptive use credit in the Lock Ditch, consisting of Fountain Creek Priorities 15 and 22. The consumptive use credit associated with the Lock Ditch water rights is available for augmentation purposes or for storage in Pueblo Reservoir. Water diverted pursuant to Security's changed Lock Ditch water rights is measured and discharged back to Fountain Creek at the Chilcott Ditch augmentation station.

Hayden Ranch. Security acquired several water rights along Hayden Creek, a small tributary of the Arkansas River near the small community of Coaldale, located between Salida and Canon City. These water rights were changed to allow municipal and augmentation uses by Security in Case No. 16CW3055. The consumptive use credit for the Hayden Ranch water rights is an average of 207.2 acre-feet per year. After a transit loss of around 5.1 percent to Pueblo Reservoir, the net deliverable amount at Pueblo Reservoir for conveyance through the Fountain Valley Conduit is an average of approximately 197 acre-feet per year.

Twin Lakes Shares. Security currently owns 14 shares of the Twin Lakes Reservoir and Canal Company (Twin Lakes). The total volume of water attributable to Security's Twin Lakes shares, including both the native and transbasin components of this supply, can be conveyed to Security through the Fountain Valley Conduit. In addition, the transbasin component of Security's Twin Lakes deliveries (and the return flows from such deliveries) can be applied for augmentation purposes pursuant to Security's augmentation plan decreed in Case No. 16CW3055. The total firm yield of Twin Lakes shares (both native and transbasin components) is approximately 0.78 acre-feet per year per share, or 10.9 acre-feet per year for Security's 14 shares. The firm yield of the transbasin component is approximately 0.73 acre-feet per year per share, or approximately 10.2 acre-feet per year for Security's 14 shares. After a transit loss of around 10.0 percent from Twin Lakes Reservoir to Pueblo Reservoir, the total net yield at Pueblo Reservoir is approximately 9.8

acre-feet per year, and the net yield for the transbasin component is approximately 9.2 acre-feet per year.

5.0 SOUTHERN DELIVERY SYSTEM AND PUEBLO RESERVOIR STORAGE CAPACITY

Security participated with Colorado Springs Utilities, the City of Fountain, and Pueblo West Metropolitan District for construction of the Southern Delivery System (SDS), which is a pipeline project that physically delivers additional water supplies from Pueblo Reservoir to these entities. The project was completed in 2016 and includes a connection to the outlet works of Pueblo Reservoir, pump stations, approximately 47 miles of 66-inch diameter pipeline, and a new water treatment plant. Security's share of capacity in SDS is 930 acre-feet per year of treated water delivered to Security's municipal water system. The primary source of water for Security's SDS supply is Security's Fry-Ark Project water and Fry-Ark Project return flows after initial use in Security's water system. These return flows are delivered to Pueblo Reservoir by exchange in cooperation with the Southeastern Colorado Water Conservancy District.

5.1 SDS Project Storage Capacity in Pueblo Reservoir

Security's participation in the SDS Project includes 1,500 acre-feet of Long-Term Excess Capacity Contract storage space in Pueblo Reservoir. The SDS Project Contract storage space is also informally known as "Long-Term" storage space. Water stored in this space is used as the actual physical source of water that is delivered through the north outlet works of Pueblo Reservoir into the SDS Pipeline. Security's Fry-Ark Project return flows can be stored in this storage space. This storage space was phased-in under a long-term contract with the Bureau of Reclamation, negotiated in 2010, pursuant to the following schedule:

2015-2016	750 acre-feet
2017-2018	1,000 acre-feet
2019-2020	1,250 acre-feet
2021 and thereafter	1,500 acre-feet

5.2 Southeastern District Master Contract Storage Capacity in Pueblo Reservoir

Security delivers water from other fully consumable sources to storage in Pueblo Reservoir, including consumptive use credits attributable to its FMIC, Chilcott Ditch Company, and Lock Ditch water sources. Security entered into a Master Contract with the Southeastern Colorado Water Conservancy District and the Bureau of Reclamation that provides Security

up to 1,500 acre-feet of Excess Capacity storage space in Pueblo Reservoir. At this time, Security has 250 acre-feet of Excess Capacity storage space available under the Southeastern District Master Contract, but the agreement allows this amount to be increased up to 1,500 acre-feet. This storage space is also informally known as “If-and-When” storage space. Security’s FMIC, Chilcott Ditch Company, and Lock Ditch sources can be stored in this storage space.

5.3 Operation of Pueblo Reservoir Storage Capacity

A summary of Security’s storage accounts in Pueblo Reservoir is provided below.

DESCRIPTION	STORAGE CAPACITY (acre-feet)
Storage capacity for Security’s Fry-Ark Project water under the auspices of the Fountain Valley Authority.	6,387
Excess Capacity storage space under a 2010 contract for Security’s participation in the Southern Delivery System. Currently limited to storage of Fry-Ark Project return flows.	1,500
Excess Capacity storage space under 2016 Southeastern District Master Contract, for storage of FMIC, Lock, and Chilcott water rights.	1,500
Total	9,387

The SDS Project Contract storage space and Southeastern District Master Contract storage space at Pueblo Reservoir are operated to (1) provide deliveries of Fry-Ark Project water and Fry-Ark Project return flows from Pueblo Reservoir through the SDS and (2) supplement deliveries of Fry-Ark Project water (together with Security’s other fully consumable stored water) through the Fountain Valley Conduit. The supplemental deliveries through the Fountain Valley Conduit ensure that a full 1,564 acre-feet can be delivered to Security from the Fountain Valley Conduit on a sustainable basis. Without such supplemental deliveries, Security’s 6,387 acre-feet of Fry-Ark Project storage (discussed in Section 3.2 of this report) might otherwise be emptied during a series of drought years with limited Fry-Ark Project supplies. The SDS Project Contract and Southeastern District Master Contract storage accounts can be periodically replenished from Security’s Fry-Ark return flows, FMIC, Chilcott Ditch Company, and Lock Ditch sources, all to the extent that such water sources are surplus to the replacement of depletions associated with operation of Security’s wells.

5.4 Deliveries through Colorado Springs Interconnection

To help address contamination of Security’s groundwater supply, Security purchased

deliveries from a new interconnection with Colorado Springs Utilities' distribution system beginning in 2017. Security has maintained an agreement with Colorado Springs Utilities to continue using this interconnection, known as the Clear View Drive (CVD) connection. The current agreement with Colorado Springs Utilities expires at the end of 2048 and allows Security to receive up to 2,800 acre-feet per year through the CVD connection. Under this agreement, Security provides the raw water supplies that Colorado Springs Utilities delivers through the CVD connection.

Security plans to use the CVD connection as an emergency delivery alternative to the Fountain Valley Conduit and Southern Delivery System. In other words, the interconnection would be available for Security to continue receiving deliveries from Pueblo Reservoir if the Fountain Valley Conduit or Southern Delivery System is not available.

6.0 WIDEFIELD AQUIFER RECHARGE PROJECT

Security is planning the long-term future development of a project for recharge of the Widefield Aquifer to enhance Security's overall water supply known as the WARA Project. It is anticipated that this project will be a joint effort by Security, Widefield Water and Sanitation District, and the City of Fountain. Water used for recharge by Security will consist of replacement water available from FMIC shares, Fry-Ark return flows, Lock Ditch, and Chilcott Ditch water rights. The water rights aspects of the exchange and recharge plan were decreed in Case No. 01CW149.

Under the first phase of this project, decreed recharge sources will be treated to improve water quality and then recharged into the Widefield Aquifer at existing converted wells or new wells to be constructed for this purpose. The locations of the recharge and recovery wells will be determined in accordance with the Widefield Aquifer computer model, which was approved in the Widefield Aquifer Stipulation and by the Water Court in Case No. W-116. In accordance with the Stipulation, Security, Widefield, and Fountain will then withdraw the recharged water from the Widefield Aquifer through their well fields for use in their respective water systems.

In order to optimize the recharge and recovery of water in the Widefield Aquifer, Widefield, Security, and Fountain are planning the joint construction of facilities, including water storage and treatment facilities, transmission pipelines, and recharge wells. A key aspect of the project includes transient storage of recharged water within the Widefield Aquifer, which will allow for recharge at a relatively constant basis throughout the year and withdrawals delayed on a time-step basis that is more directly linked to seasonal municipal demands.

Security has obtained the necessary Water Court approval for this project, and Security has completed an agreement with FMIC that includes consent for diversion of water for this project and the delivery of such water through FMIC's facilities. Therefore, the water rights required for this project are assured.

7.0 WATER SYSTEM YIELD

We calculated the water system yield available to Security by evaluating the physical availability of water at Security's delivery facilities, together with the fully consumable water sources that can be used to support such deliveries on a reliable basis. A summary of the water supply presently available to Security on a firm annual basis is presented in the attached Table No. 3. As shown on Table No. 3, the calculated current and near-term water system yield is **5,434 acre-feet per year**.

Taking into account the production of return flows from Security's municipal uses, we estimate that approximately 2.0 acre-feet of water deliveries from Security's wells can be produced from each acre-foot of fully consumable water used for augmentation of the well deliveries. We also estimate that approximately 1.5 acre-feet of water deliveries from Pueblo Reservoir can be produced from each acre-foot of fully consumable augmentation supplies. These factors were estimated by the evaluating both (1) the replacement requirements associated with the well diversions to Security's municipal system, as determined under Security's decreed augmentation plans, and (2) the volumes of fully consumable supplies that are delivered to Pueblo Reservoir, conveyed to Security's municipal system, and successively used to extinction (by delivery of the return flows attributable to these deliveries back to Pueblo Reservoir and Security's municipal system). The greater requirement for fully consumable supplies to support Pueblo Reservoir deliveries is due to evaporation losses at Pueblo Reservoir and transit losses as water rights are delivered for storage in Pueblo Reservoir by exchange or trade.

The volume of water physically available at Security's delivery facilities is approximately 6,175 acre-feet per year. This level of supply, however, would require approximately 1,794 acre-feet per year of fully consumable water, which exceeds the 1,702 acre-feet per year of fully consumable supplies identified in Table No. 2. As a result, Security's current and near-term water system yield is limited by the available fully consumable supplies. Specifically, the 1,702 acre-feet of fully consumable supplies presently available to Security can support approximately 6,038 acre-feet per year of physical deliveries to Security. Applying a 10

percent contingency for climate change or other future reductions to Security's water supplies results in the calculated water system yield of 5,434 acre-feet per year.

The 5,434 acre-feet per year of annual water supply is a reasonably firm figure for current water supply planning purposes because Security has acquired the appropriate physical supplies and water rights to support such supplies. It is a complex matter to evaluate average and drought cycle yields of water supply sources, while also evaluating the carry-over storage in the Fountain Valley Authority accounts and Long-Term Excess Capacity storage at Pueblo Reservoir. Therefore, this specific estimate of Security's water system yield is subject to continuing analysis and revision.

8.0 WATER QUALITY

Prior to 2016, the water quality of the Widefield Aquifer and Windmill Gulch Aquifer generally met all state and federal drinking water standards after appropriate disinfection conducted at Security's wells. As an exception to this general condition, two of Security's wells, S-10 and S-14, had concentrations of tetrachloroethene (PCE) greater than the maximum contamination level permitted by the Safe Drinking Water Act regulations. The main sources of contamination were identified, and remediation plans were implemented. Water treatment plants have been constructed for removal of PCE from these wells, bringing the system into water quality compliance with respect to PCE.

As mentioned in Section 1.0 above, Security's wells exceeded the EPA and CDPHE lifetime health advisory levels for PFASs starting in 2016. As a result, Security relied entirely on surface water supplies delivered from Pueblo Reservoir and on purchased deliveries from Colorado Springs Utilities' distribution system during 2016 through 2020. The water treatment facility to address PFASs from Security's groundwater supply came online in 2021, at which time Security resumed operation of its wells. Security's operations during 2016 through 2020 highlighted the importance of maintaining redundant sources of supply to address contamination of Security's groundwater supplies.

Water quality of the Fry-Ark Project water and other supplies delivered from Pueblo Reservoir is good, meeting all state and federal drinking water regulations. Because the Fry-Ark Project and other fully consumable water from Pueblo Reservoir is derived from a surface streamflow source, treatment provided by the Fountain Valley Authority and Southern Delivery System facilities includes filtration and disinfection.

9.0 SECURITY WATER DEMAND

As of April 2025, there were approximately 7,959 water service connections within Security's service area. Water use demand has been generally declining in recent years because there has been relatively minor growth in Security's service area and water conservation practices within the service area have become more established. Over the past ten years, Security's historical water demand has ranged from approximately 2,189 acre-feet per year to 2,813 acre-feet per year, as summarized in Table No. 4, with an average of 2,533 acre-feet per year. For planning purposes, Security's current water demand is considered to be the highest annual value during the past ten years, or 2,813 acre-feet per year.

Security's future anticipated water demand is summarized in Table No. 5. These calculations indicate that Security has made commitments to serve development totaling approximately 318 acre-feet per year. When added to the current water demand, the future demand commitments are equal to approximately 3,131 acre-feet per year.

Security estimates that the additional water demands to serve other specific developments within its service area could total 395 acre-feet per year within the foreseeable future. Including an additional 10 percent contingency for water supply planning purposes, the total future water demand could be approximately 3,879 acre-feet per year.

10.0 AVAILABILITY OF WATER TO SUPPORT ADDITIONAL DEMANDS

A comparison is presented below of Security's water supply and water demands.

	ANNUAL VOLUME (acre-feet)
Water Supply Current and near-term water supply (with 10% contingency)	5,434
Water Demand Current water demand	2,813
Current water demand plus commitments for future water service	3,131
Future foreseeable water demand	3,526
Future foreseeable water demand, plus 10% contingency	3,879
Surplus Water Supply Current and near-term water supply compared with current water demand	2,621
Current and near-term future water supply compared with future expected demand (with 10% contingency)	1,555

As summarized above, Security currently has approximately 2,621 acre-feet per year of surplus water supply, based on a comparison of the current water supply (including a 10 percent contingency) and the current water demand. There is a surplus of approximately 1,555 acre-feet per year between the current and near-term future water supply and the foreseeable future expected water demand, including a 10 percent contingency. Security plans to apply the excess supply to provide for additional drought protection, redundancy, and reliability within its water system. It is our opinion that maintaining the surplus supply for these purposes is an appropriate, standard, and prudent water resources planning practice, particularly considering the uncertainty of climate change impacts and Security's vulnerabilities to increased groundwater contamination and to delivery infrastructure issues.

with the Fountain Valley Conduit and SDS. The Fountain Valley Conduit and the SDS deliveries are each made through single pipeline systems.

11.0 SUMMARY AND CONCLUSIONS

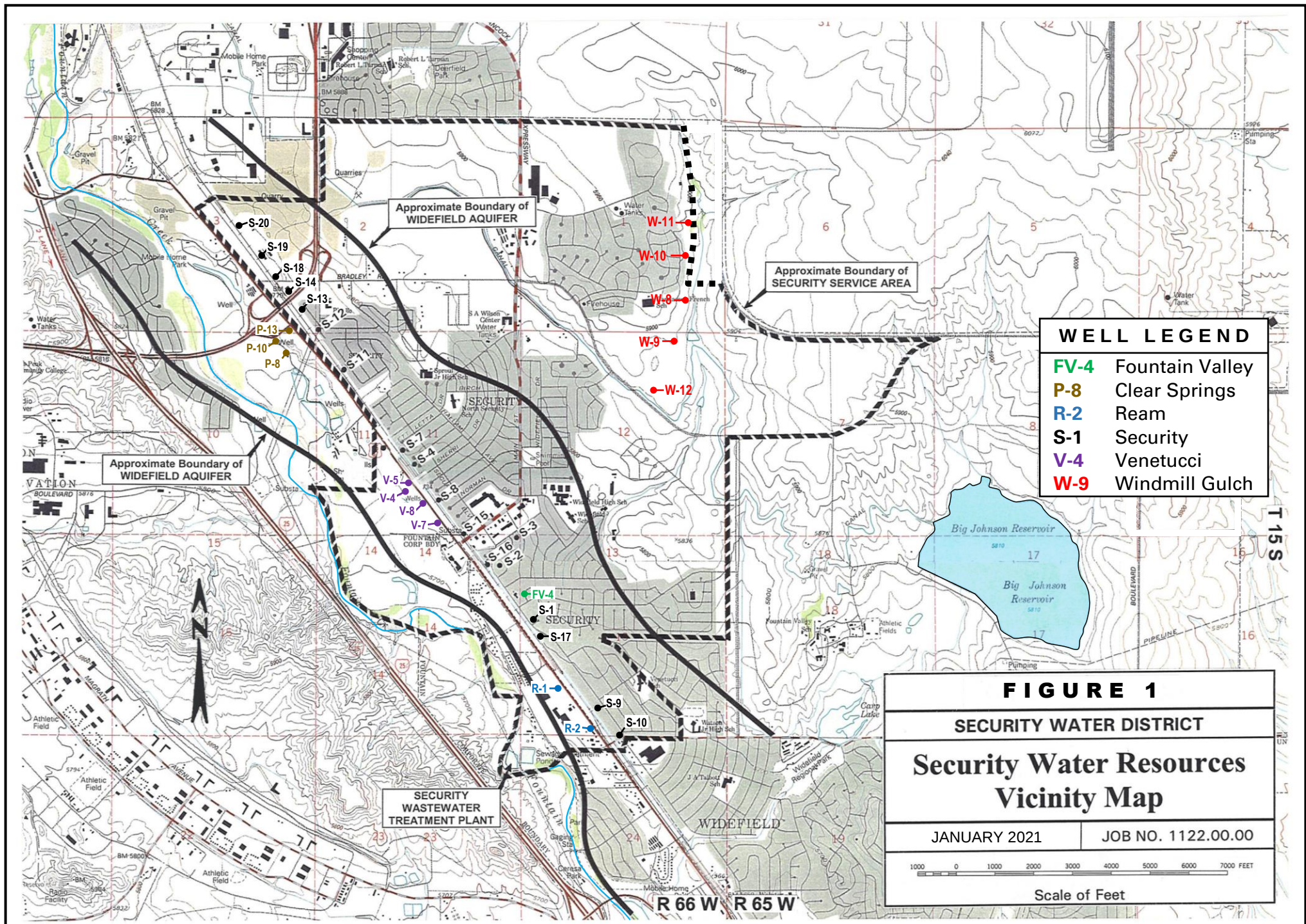
Security has developed an extensive and reliable portfolio of water supply sources and water rights. Security obtains its water supply from numerous wells, mostly located in the Widefield Aquifer near Security's service area. Such groundwater supplies are supplemented by Fry-Ark Project water and Fry-Ark Project return flows stored in Pueblo Reservoir and delivered to Security through the Fountain Valley Conduit and Southern Delivery System. Security also obtains its water supply from other fully consumable water sources delivered from Pueblo Reservoir through the Fountain Valley Conduit. Security's water rights include a complex system of decrees, well permits, and agreements.

In recent years, Security has acquired senior water rights in the Fountain Mutual Irrigation Company, Lock Ditch, Chilcott Ditch Company, and on the Hayden Ranch, which have been changed for municipal and augmentation use. Security has also acquired additional shares in the Fountain Mutual Irrigation Company and the Chilcott Ditch Company that are subject to pending and future changes to allow municipal use and augmentation use by Security. Security also participated with Colorado Springs Utilities, the City of Fountain, and Pueblo West Metropolitan District for construction of the Southern Delivery System. Security's participation in the SDS Project includes Long-Term Excess Capacity Contract storage space in Pueblo Reservoir to support the SDS deliveries. Security also joined with the Southeastern Colorado Water Conservancy District and numerous other municipal water supply entities in a Master Contract for Long-Term Excess Capacity storage space in Pueblo Reservoir. Finally, Security has entered into an agreement with Colorado Springs Utilities to receive deliveries from Pueblo Reservoir through interconnection with Colorado Springs Utilities' distribution system.

All of the above activities have enhanced Security's ability to provide augmentation for its wells in the Widefield Aquifer and the Windmill Gulch Aquifer, to provide water deliveries from Pueblo Reservoir through the Fountain Valley Conduit and the Southern Delivery System, and to diversify and enhance the reliability of its water supply.

Security's current water demand is 2,813 acre-feet per year, compared with a current and near-term available water supply of 5,434 acre-feet per year (including a 10 percent contingency), resulting in a current surplus supply of approximately 2,621 acre-feet per year. Security's foreseeable future water demand, including a 10 percent contingency, is approximately 3,879 acre-feet per year. Therefore, Security's current and near-term future water supply will exceed its future foreseeable water demand by approximately 1,555 acre-feet per year.

In conclusion, Security has adequate water supplies and water rights to meet its current water demand, plus its commitments for future water service. Security's surplus near-term water supplies will provide greater levels of drought protection, redundancy, and reliability within its water system. The surplus is necessary to protect against climate change impacts, infrastructure issues with the Fountain Valley Conduit and Southern Delivery System, and the potential for future increased contamination of Security's wells.



WELL LEGEND	
FV-4	Fountain Valley
P-8	Clear Springs
R-2	Ream
S-1	Security
V-4	Venetucci
W-9	Windmill Gulch

FIGURE 1	
SECURITY WATER DISTRICT	
Security Water Resources Vicinity Map	
JANUARY 2021	JOB NO. 1122.00.00
Scale of Feet	

**TABLE 1
WELLS USED IN SECURITY'S WATER SYSTEM**

WELL NAME	PERMIT NO.	DECREE	PERMIT RATE (gpm)	DECREE RATE (gpm)
WIDEFIELD AQUIFER WELLS				
S-1	20490F	W-112	507	507
S-2	20491F	W-112	925	925
S-3	45820F	W-112	326	326
S-4	20492F	W-112	1,100	1,100
S-7	20493F	W-112	1,010	1,010
S-8	20494F	W-112	961	961
S-9	20495F	W-112	651	651
S-10	20496F	W-112	350	350
S-11	45821F (28724RF)	W-112	925	925
S-12	45822F	W-112	709	709
S-13	2382F	W-112	550	898
S-14	2383F	W-112	800	611
S-15	45823F	W-112	830	830
S-16	20497F	W-112	552	552
S-17	4844F	W-112	850	539
S-18	41748F	90CW28	675	675
S-19	41749F	90CW28	675	675
S-20	41750F	90CW28	675	611
Ream 1	4962F	W-3174	1,000	2,272
Ream 2	5022F	W-3174	1,000	3,161
FV-4	42031F (20529S)	W-347	650	642
Camden #1	18378R	W-1551	450	800
Bender 1	18291F	W-664, 81CW225		630
Bender 2	7800F	W-664, 81CW225		1,350 927 (cond.)
45% Interest in Production from the Following Wells:				
V-4	18664R	W103-W111		1,250
V-5	17490U	W103-W111		1,250
V-7	4869F	W103-W111		1,200
V-8	4907F	W103-W111		1,150
Clear Springs Ranch Wells leased from Colorado Springs Utilities:				
P-8	77072-F	W-116, 12CW99		1,790
P-10	77073-F	W-116, 12CW99		1,800
P-13	77074-F	W-116, 12CW99		1,300
WINDMILL GULCH AQUIFER WELLS				
W-8	46011F (20663R#2)	W-400	1,000	1,000
W-9	46012F (20663R#5)	W-400	760	760
W-10	20663R#3	W-400	700	700
W-11	20663R#4	W-400	300	300
W-12	20663RR#1	W-400	300	300

Table 2
Security Fully Consumable Water Sources
(values in acre-feet per year)

	Description of Fully Consumable Water Source	Average-Annual Amount
1	1.73 cfs of Fountain Creek Priority No. 4	481
2	Sewered return flows from Security's use of Fry-Ark Project water	473
3	Non-sewered return flows from Security's use of Fry-Ark Project water	81
4	637 Fountain Mutual Irrigation Company Shares	446
5	86 Fountain Mutual Irrigation Company Shares	60
6	10.25 Chilcott Ditch Shares	252
7	1 Chilcott Ditch Share	25
8	Lock Ditch	159
9	Hayden Ranch	197
10	14 Twin Lakes Shares (transbasin component)	9
11	Total Excluding Priority No. 4	1,702

Notes:

- 1 The consumptive use credit associated with this water right is the replacement source in Security's augmentation plan decreed in Case No. W-4212.
- 2 Quantified in Security's augmentation plan decreed in Case No. 90CW28. The above amount is based on the average Project Water deliveries to Security (1,042 acre-feet per year).
- 3 Quantified in Security's augmentation plan decreed in Case No. 01CW149. The above amount is based on the average Project Water deliveries to Security (1,042 acre-feet per year).
- 4 Changed by Security for municipal and augmentation uses in Case Nos. 90CW28, 01CW149, 07CW51, or 12CW99.
- 5 Security has applied to change these shares for municipal and augmentation uses in Case No. 23CW3039.
- 6 Changed by Security for municipal and augmentation uses in Case No. 06CW119.
- 7 This share has not yet been changed by Security for municipal and augmentation uses.
- 8 Changed by Security for municipal and augmentation uses in Case No. 06CW117.
- 9 Changed by Security for municipal and augmentation uses in Case No. 16CW3055. The above amount is reduced by transit losses from the Hayden Ranch to Pueblo Reservoir.
- 10 Transbasin component included in Security's augmentation plan in Case No. 16CW3055. The above amount is reduced by transit losses from Twin Lakes Reservoir to Pueblo Reservoir.
- 11 The Priority No. 4 water right is excluded from the total because the consumptive use credit is accounted for by the 2,000 acre-feet of well pumping authorized in Case No. W-4212.

Table 3
Security Current and Near-Term Future Water System Yield
(values in acre-feet per year)

		A	B	C
	Water Supply Source	Annual Physical Supply Amount	Security Fully Consumable Water Required	Cumulative Fully Consumable Water Required
1	Fry-Ark Project Water through Fountain Valley Conduit	1,042	0	0
2	Other Fully Consumable Water through Fountain Valley Conduit	521	347	347
3	Widefield Aquifer Wells, Case No. W-4212	2,000	102	449
4	Widefield Aquifer Wells, other cases	343	172	621
5	Windmill Gulch Wells Augmented by Widefield	200	0	621
6	Windmill Gulch Wells Augmented by Security	40	20	641
7	Venetucci Wells	596	298	939
8	Leased Clear Springs Wells	600	300	1,239
9	Southern Delivery System	832	555	1,794
10	Subtotal	6,175	1,794	
11	Water Supply Yield Limited by Available Fully-Consumable Supplies	6,038	1,702	
12	Water Supply Yield with 10 Percent Contingency	5,434		

Column Notes:

- A Annual supply that is physically available for delivery to Security.
- B Annual amount of Security's fully consumable water to support the delivery amounts in Column A. Wheeler estimates that approximately 2.0 acre-feet of water deliveries from Security's wells can be produced from each acre-foot of fully consumable water. Wheeler estimates that approximately 1.5 acre-feet of water deliveries from Pueblo Reservoir can be produced from each acre-foot of fully consumable water.
- C Cumulative total for Column B.

Row Notes:

- 1 For the Fry-Ark Project, limitations of the yield of the Western Slope water rights cause the average annual yield to be limited to roughly two-thirds of the 1,646 acre-feet per year delivered through the Fountain Valey Conduit, for an actual yield of about 1,097 acre-feet per year. After five percent transmission and treatment loss, the net Fountain Valley Conduit delivery amount attributable to Fry-Ark Project water is approximately 1,042 acre-feet per year.
- 2 The remaining 549 acre-feet per year delivered through the Fountain Valley Conduit is supplied out of Security's other fully consumable sources stored at Pueblo Reservoir. After five percent loss, the net delivery amount is approximately 521 acre-feet per year.
- 3 Depletions from well diversions under the Case No. W-4212 augmentation plan are replaced by Security's 1.73 cfs interest in the Priority No. 4 water right, except for 102 acre-feet of depletions during the winter.
- 4 Diversions exceeding the 2,000 acre-feet per year under the Case No. W-4212 augmentation plan. These wells can temporarily pump an additional 10 percent from the Widefield Aquifer, but such additional pumping is conservatively excluded from this table because it is unknown if the increased pumping allowance will be permanent.
- 5 The initial 200 acre-feet per year of Security's diversions from the Windmill Gulch wells is augmented by Widefield Water and Sanitation District.
- 6 Diversions from the Windmill Gulch Aquifer exceeding the 200 acre-feet per year augmented by Widefield Water and Sanitation District.
- 7 Venetucci Wells diversions by long-term lease with the Pikes Peak Community Foundation. These wells can temporarily pump an additional 10 percent from the Widefield Aquifer, but such additional pumping is conservatively excluded from this table because it is unknown if the increased pumping allowance will be permanent.
- 8 The Clear Springs wells are leased from Colorado Springs Utilities for a term that extends through December 31, 2037.
- 9 Security's share of capacity in SDS is 930 acre-feet per year of treated water delivered to Security's municipal water system. The primary source of fully consumable water for Security's SDS supply is Security's Fry-Ark return flows stored in Pueblo Reservoir. For this anlaysis, we have limited SDS deliveries to 832 acre-feet per year, which is the amount supported by Security's Fry-Ark return flows of approximately 555 acre-feet per year.
- 10 Sum of Row Nos. 1 through 9. The physically available supply of 6,175 acre-feet per year would require approximatley 1,794 acre-feet per year of fully cocsumable water, which exceeds the fully consumable supplies presently available to Security.
- 11 Water supply deliveries that can be supported by the fully consumable supplies presently available to Secuirty (1,702 acre-feet per year identified in Table No. 2).
- 12 Column No. 11 reduced by ten percent contingency for reduction in yield due to climate change or other future conditions.

TABLE 4
SECURITY TOTAL HISTORICAL WATER DEMAND
(Values in Acre-Feet)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2015	130	115	158	211	174	282	312	336	332	219	139	126	2,534
2016	135	134	142	184	280	405	370	316	308	257	149	132	2,813
2017	137	127	173	197	245	419	333	258	306	164	125	128	2,612
2018	126	113	152	200	372	404	330	273	314	177	117	143	2,720
2019	148	128	136	188	246	280	369	347	326	171	119	121	2,580
2020	123	117	133	172	347	363	356	326	297	230	129	129	2,721
2021	127	106	122	172	227	303	325	355	299	185	113	114	2,447
2022	110	100	119	197	278	310	291	283	270	193	133	113	2,397
2023	119	105	125	153	214	193	277	305	259	209	110	120	2,189
2024	121	112	120	152	235	305	304	260	260	207	111	130	2,318
Average	127	116	138	183	262	326	327	306	297	201	124	126	2,533

For planning purposes, Security's current water demand is considered to be the highest value for 2015-2024 - 2,813 acre-feet.

R:\1100\1122\1122.00\DESIGN\Water Supply Planning\[Historical water demand-2005-24.xlsx]Sum Tble-2015-24

TABLE 5
SECURITY WATER DEMAND COMMITMENTS AND PROJECTIONS

	Acre-Feet per Year
Current Water Demand	2,813
Future Water Service Commitments	
Academy Station	*0.7
Haven Valley	49.0
Parkway Commercial	64.6
Riverbend Residential	105.1
Riverbend Commercial	7.5
Southmoor Ridge	66.0
Beckett Development 1A	5.0
Southeast Corner of Hancock and Yucatan	20.0
Subtotal Future Commitments	317.9
Subtotal Current & Future Demand Commitments	3,131
Additional Future Expected Demand	
EPC Parcel 6500000094-Powers Grinnell	25.0
Aggregate Industries – 325 acres	260.0
Vacant Land Infill and Redevelopment	50.0
NE Corner Hancock and Bradley	60.0
Subtotal Additional Future Expected Demand	395.0
Total All Future Demand	3,526
Total, including additional 10 percent as a contingency	3,879

* Represents the remaining water demand for units that have not yet been constructed within these subdivisions.