SUMMARY OF OPERATIONS

Fiscal Year 2023

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

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Acronyms

AF	Acre feet
ASR	Aquifer storage and recovery (treated surface water pumped into the underground aquifer, then retrieved for use at a later date)
cfs	Cubic feet per second
CT	Concentration x time (for chlorination)
CUWCD	Central Utah Water Conservancy District
FY/FYT	Fiscal year/Fiscal year total
gpcd	Gallons per capita per day
GWR	Groundwater Rule
HAA	Haloacetic acid
HPC	Heterotrophic plate count
JVWCD	Jordan Valley Water Conservancy District
JVWTP	Jordan Valley Water Treatment Plant
M&I	Municipal and Industrial
MG	Million gallons
MGD	Million gallons per day
mg/L	Milligrams per liter
MPG	Miles per gallon
MWDSLS	Metropolitan Water District of Salt Lake and Sandy
NTU	Nephelometric turbidity units
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
SCADA	Supervisory Control and Data Acquisition
SERWTP	Southeast Regional Water Treatment Plant
SWGWTP	Southwest Groundwater Treatment Plant
TDS	Total dissolved solids
THM	Trihalomethane
WBWCD	Weber Basin Water Conservancy District
WCWCD	Washington County Water Conservancy District

Introduction

Jordan Valley Water Conservancy District compiles a Summary of Operations at the end of each fiscal year. The Summary of Operations reports on all District activities, from wholesale water deliveries to fuel costs, Conservation Garden Park attendees to mainline breaks.

The purpose of this report is to provide stakeholders with an overview of our operational performance over the past year, grounded in quantitative data. Through this lens, we aim to be transparent in the management of our infrastructure, water quality, and conservation initiatives, drawing comparisons with the preceding years to identify patterns and emerging trends.


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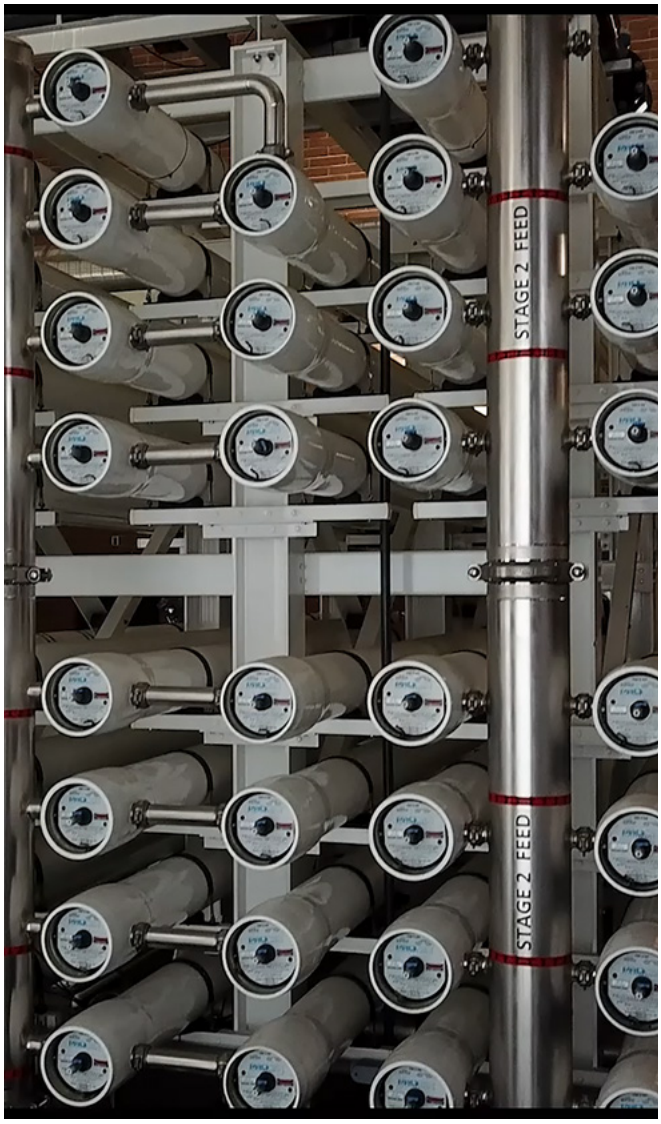
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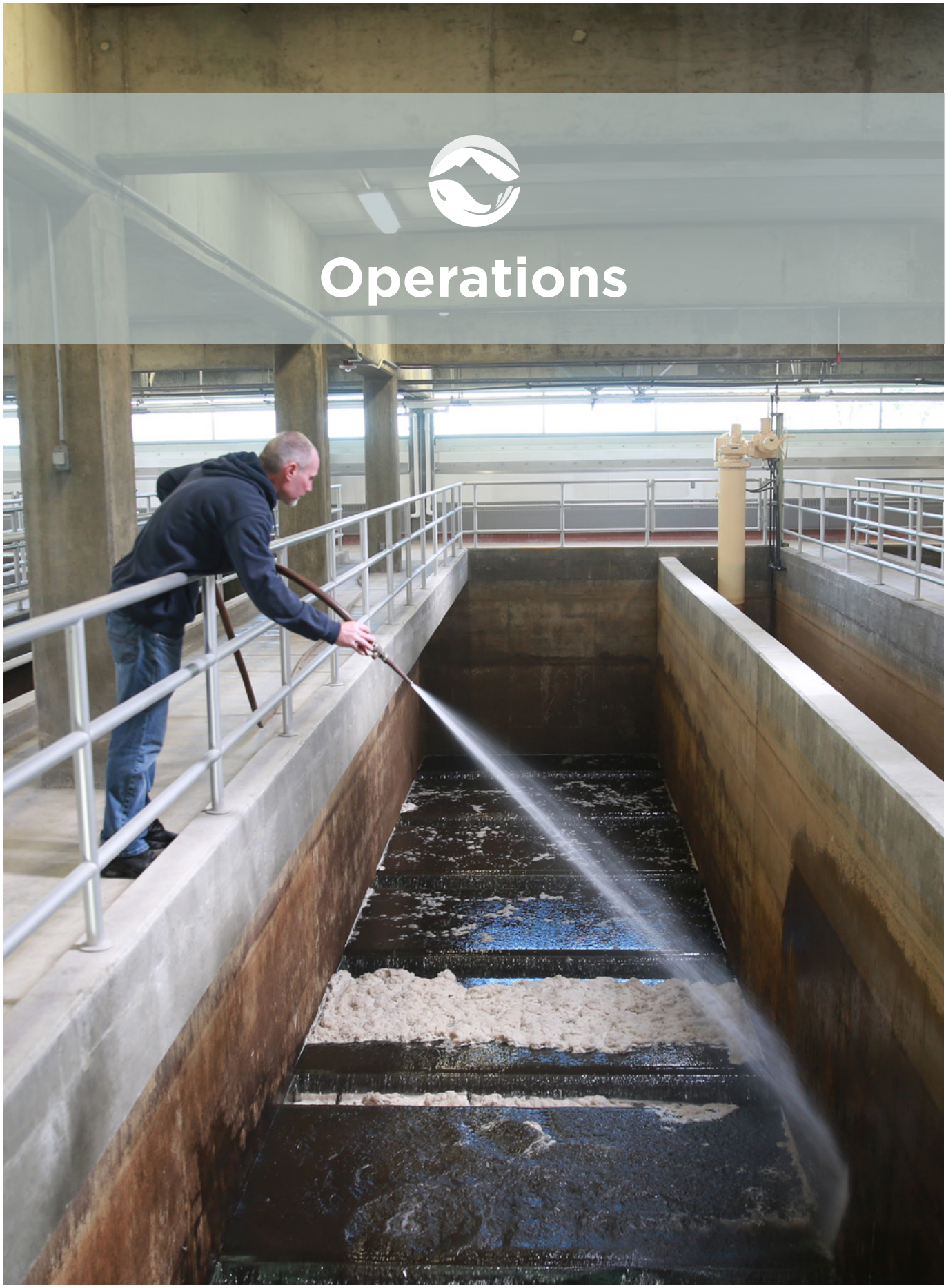
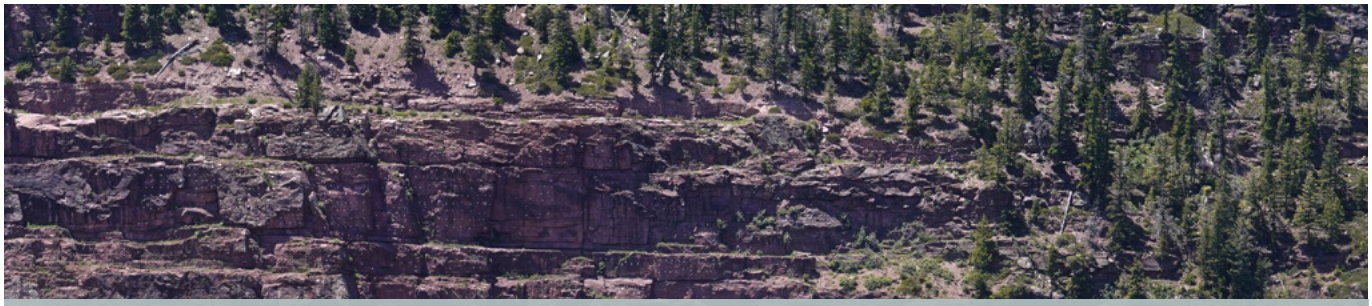
Operations



JORDAN VALLEY WATER
CONSERVANCY DISTRICT



Water Supply and Demand

Water Sources

Jordan Valley Water Conservancy District's (JVWCD's) water supply comes from a wide range of sources. Most of our Municipal and Industrial (M&I) water comes from reservoirs (stored water) or streams and rivers (unstored flows). These untreated sources are our raw water. Additionally, JVWCD supplements our supply with treated, or finished, water from treatment plants around the valley and from the Central Water Project. Figure 1 shows the sources of water for the past three years. The volumes are shown in acre feet.

Figure 1. JVWCD Water Sources (3 Years)

Source	FY2023	FY2022	FY2021
Municipal and Industrial	Acre Feet	Acre Feet	Acre Feet
Raw Water			
Jordanelle Reservoir (Central Utah Project)	31,007	35,984	56,516
Deer Creek Reservoir (Provo River Project)	12,670	10,539	11,068
Upper Provo River reservoirs	1,534	1,392	2,121
Echo Reservoir	1,786	0	998
Provo River (unstored flows) and extra allotment	28,686	16,126	13,147
Weber River (unstored flows)	0	1,833	1,291
Central Water Project	11,679	11,676	11,680
Salt Lake County mountain streams	1,449	1,248	1,317
Salt Lake County groundwater (wells)	12,733	16,225	10,218
Southwest Groundwater Project Wells	3,206	3,355	4,422
Finished Water			
Culinary water purchased from MWDSLS	867	798	1,101
Bingham Canyon Water Treatment Plant	2,859	3,114	3,321
Subtotal for Municipal and Industrial sources	*108,476*	*102,290*	*117,200*
Irrigation			
Jordanelle Reservoir (Central Utah Project)[1]	0	0	0
Deer Creek Reservoir (Provo River Project)[2]	0	0	0
Upper Provo River reservoirs[1]	0	0	0
Echo Reservoir[3]	0	0	0
Provo River (unstored flows)[1]	8,165	2,786	0
Weber River (unstored flows)[2]	0	0	0
Utah Lake	14,217	21,928	31,964
Subtotal for irrigation sources	*22,382*	*24,714*	*31,964*
Total	**130,858**	**127,004**	**149,164**

Some reservoirs are sourced from multiple rivers and streams, as noted below:

1. Provo River sources
2. Weber, Duchesne, and Provo River sources
3. Weber River sources

Water Deliveries

JVWCD provides water to about 775,000 residents of Salt Lake County. Water is provided wholesale to member agencies for municipal, industrial, and irrigation use. JVWCD also provides water to retail customers in some areas of the county. Figure 2 shows the amount of water that was delivered to member agencies and customers for the past three years. The volumes are shown in acre feet.

Figure 2. JVWCD Water Deliveries (3 Years)

Recipient	FY2023	FY2022	FY2021
Municipal and Industrial	Acre Feet	Acre Feet	Acre Feet
City of Bluffdale	3,350	3,313	3,692
Copperton Improvement District	29	1	2
Draper City	4,205	4,194	5,117
Granger-Hunter Improvement District	18,939	18,533	18,745
Herriman City	5,533	5,243	6,457
Hexcel Corporation	934	658	665
Kearns Improvement District	7,218	7,155	9,000
Magna Water District	799	803	797
Midvale City	3,450	2,761	3,253
Riverton City	5,220	4,750	4,907
City of South Jordan	16,482	15,304	18,968
City of South Salt Lake	1,073	1,020	1,020
Taylorsville-Bennion Improvement District	4,825	4,569	4,601
Utah Department of Corrections	228	447	454
WaterPro, Inc. (Treated) WaterPro, Inc. (Raw)	1,129 0	1,331 0	1,446 0
City of West Jordan	20,336	18,793	22,576
White City Water Improvement District	0	0	0
Willow Creek Country Club	303	269	374
Subtotal for wholesale deliveries	*94,052*	*89,144*	*102,074*
JVWCD retail service areas (Holladay, Murray, Sandy, South Salt Lake and unincorporated county)	7,317	7,012	8,633
JVWCD system non-revenue water (use and loss)[1,2]	7,106	6,134	6,493
Subtotal for deliveries, use and loss	*108,513*	*102,290*	*117,200*
Irrigation			
Utah Dept of Public Safety	0	0	0
Welby Jacob Water Users Co.	22,382	24,714	31,964
Subtotal for irrigation sources	*22,382*	*24,714*	*31,964*
Total	**130,895**	**127,004**	**149,164**

1. Treatment plant losses calculated based on plant use and evaporation for JVWTP and SERWTP. Includes SWGWTP by-product flow.
2. Water use and loss includes hydrant and main line flushing, main line breaks, leaks, reservoir cleaning, ASR injection and irrigation of landscaping at Jordan Valley sites. JVwWCD's non-revenue water and treatment plant use and loss as a percentage of total water delivered, treated or transported: **FY2023:** 6.1%, **FY2022:** 6.0%, **FY2021:** 5.5%.

Water Supply History

The majority of JVWCD's water is stored in three reservoirs, Utah Lake, Jordanelle, and Deer Creek. Figures 3-5 show the fluctuation of water levels caused by both weather and use from year to year and month to month over the past five years. The levels are shown by elevation.

Figure 3.
Jordanelle Reservoir Water Levels (5 Years)

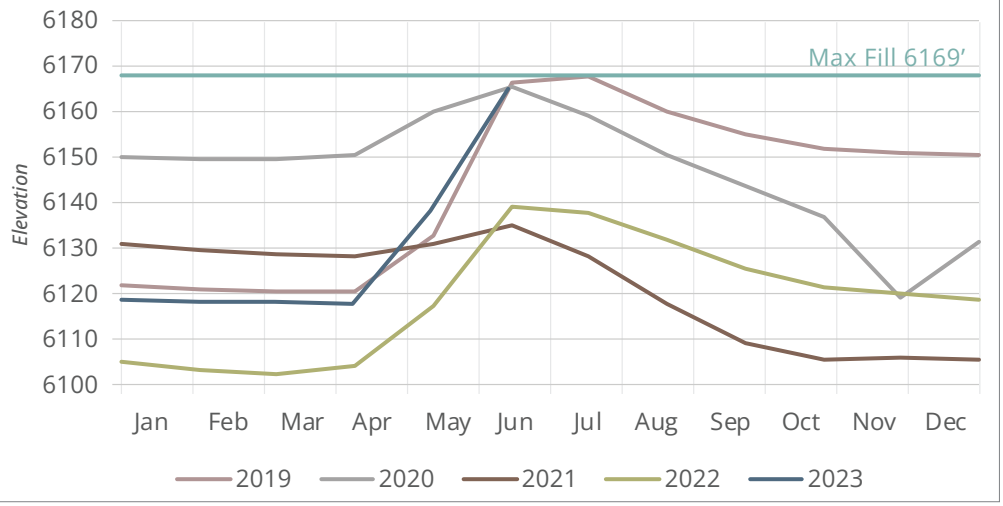


Figure 4.
Deer Creek Reservoir Water Levels (5 Years)

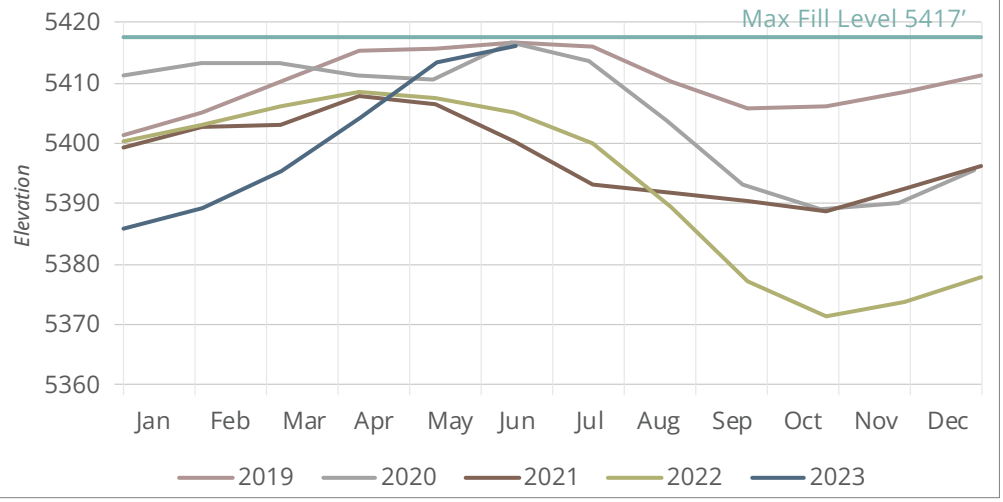
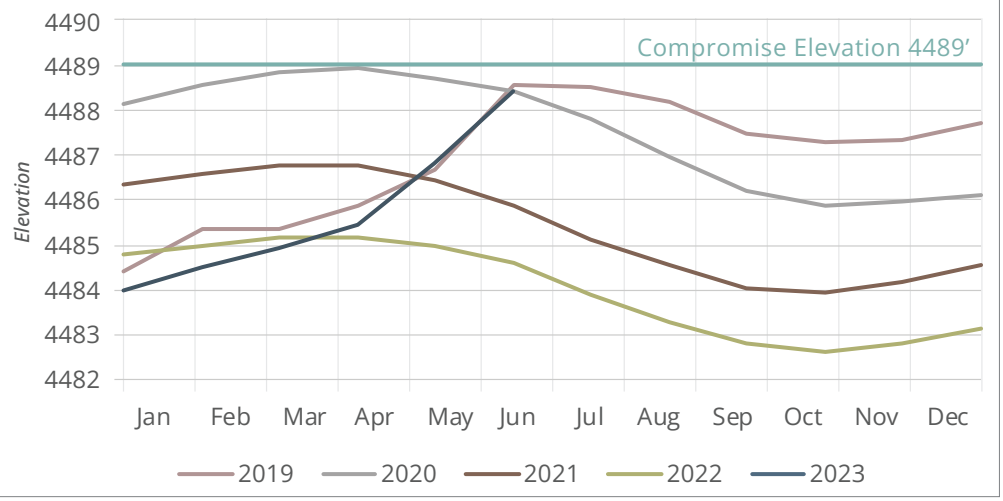
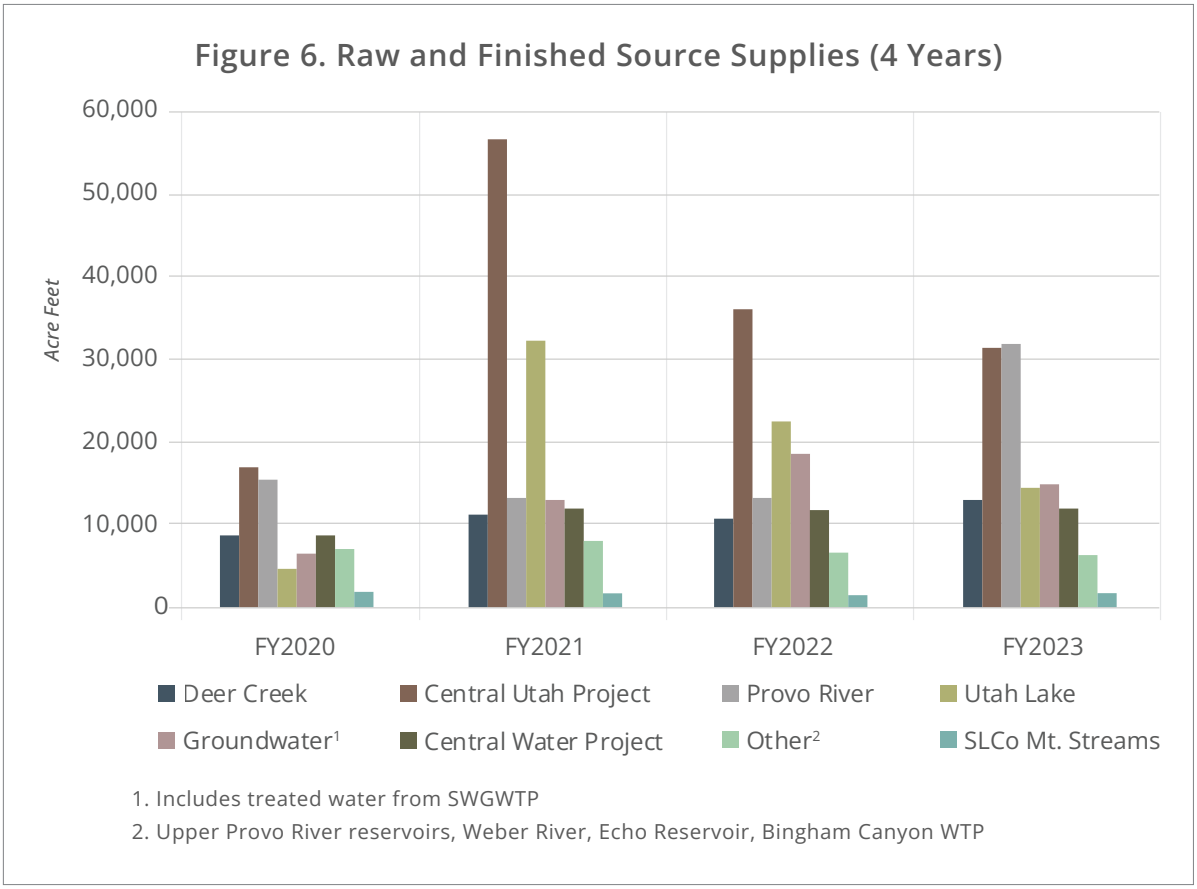


Figure 5.
Utah Lake Water Levels (5 Years)



Water Supply History *(cont.)*

Figure 6 shows how much water, in acre feet, was used from each source for the past four fiscal years.



Wholesale Deliveries

Contract deliveries are made to JVWCD's 17 wholesale member agencies. Figures 7 and 8 show the average and peak daily Municipal and Industrial (M&I) demand for the past three fiscal years in cubic feet per second (cfs).

Figure 7. Average Daily M&I Demand (3 Years)

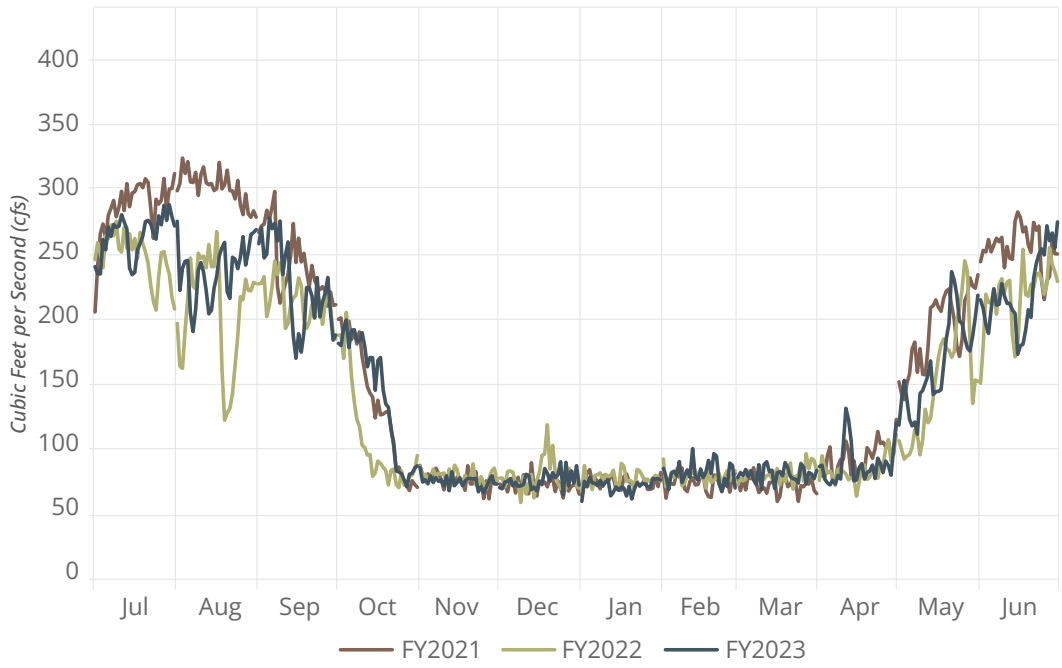
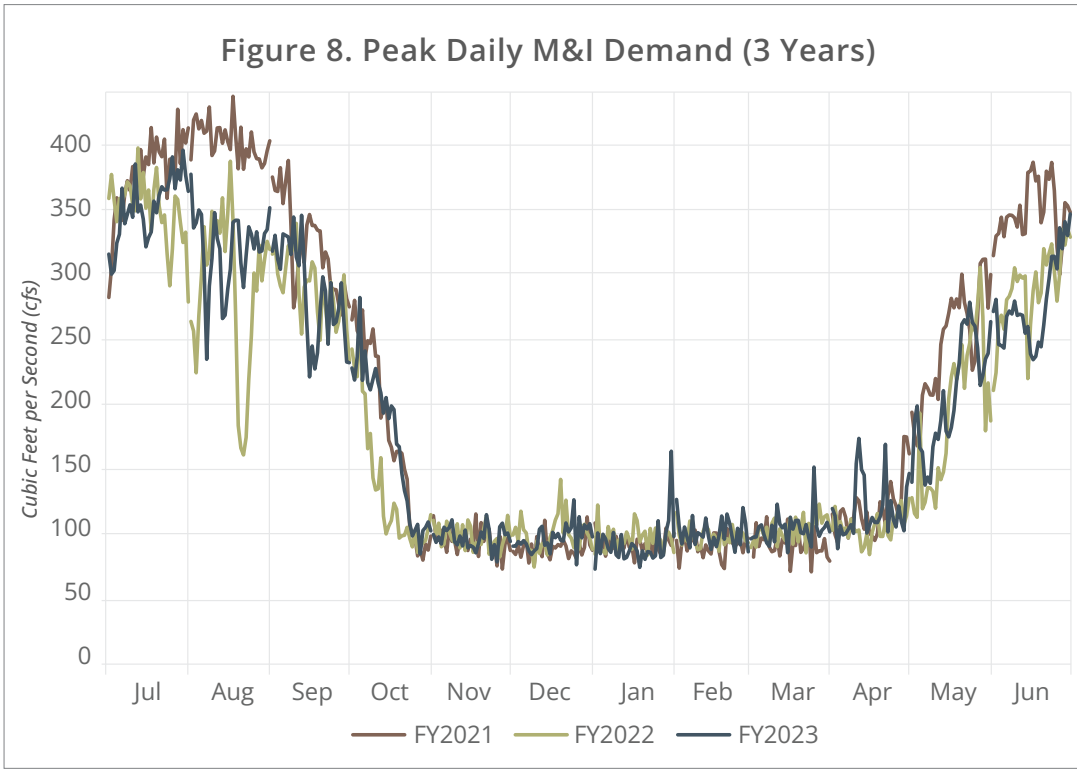
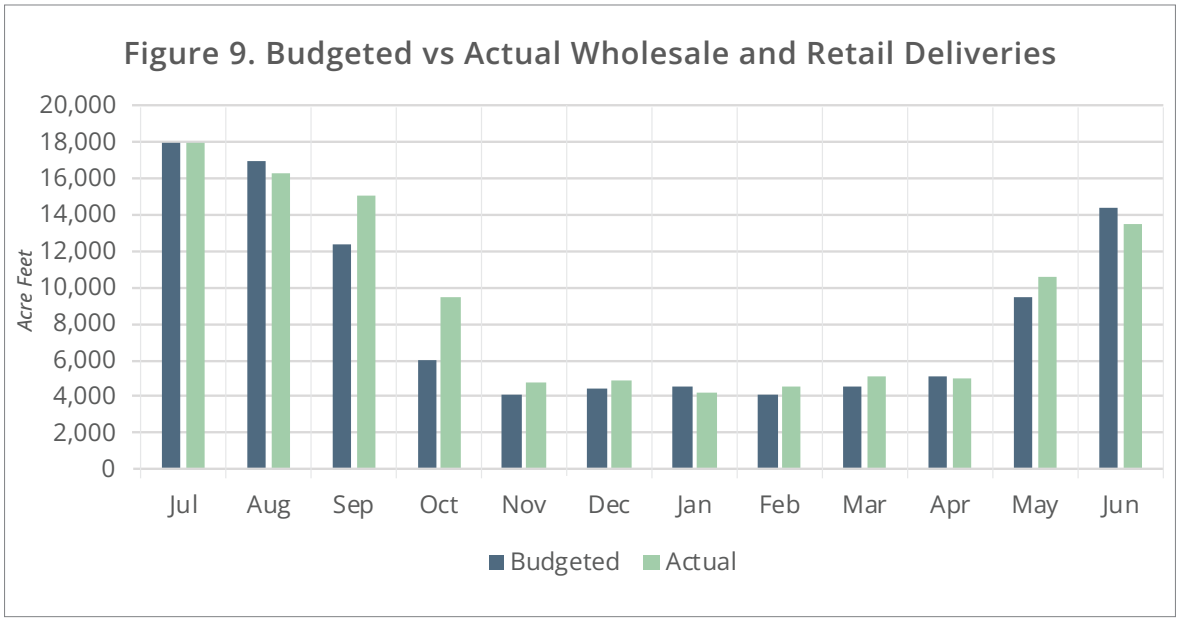


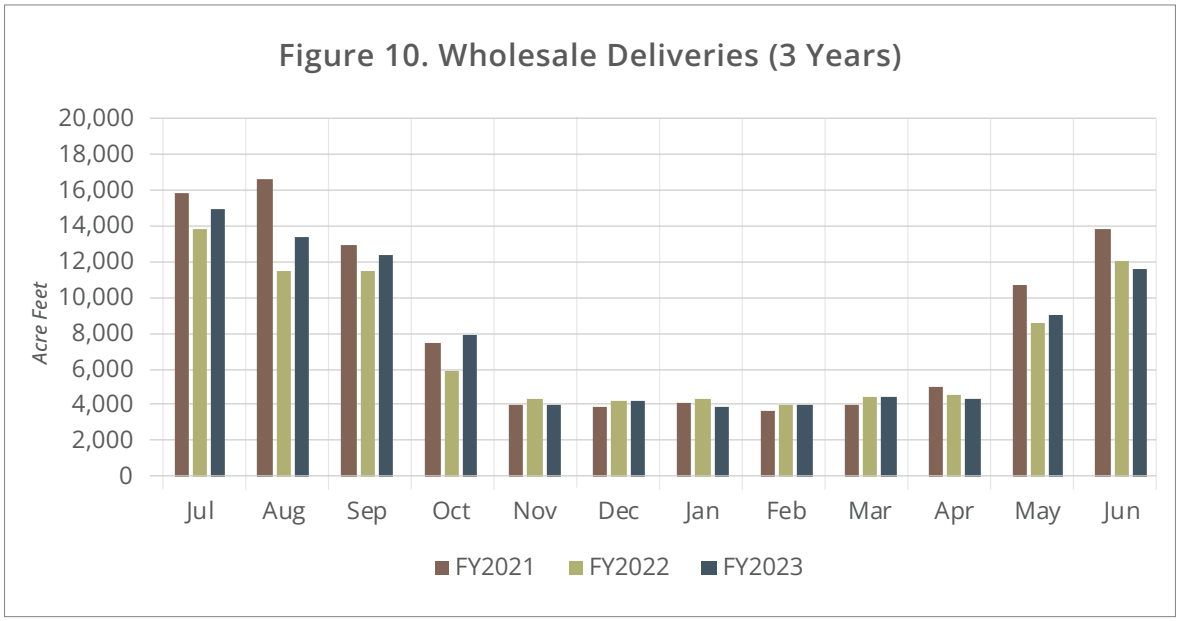
Figure 8. Peak Daily M&I Demand (3 Years)



Wholesale Deliveries *(cont.)*

Figures 9 and 10 show our actual deliveries compared to our budgeted amount for fiscal year 2023, and the monthly deliveries for the past three years.





Water Treatment

Treatment Facilities

The Treatment Division staff ensures our surface water sources are treated to not only meet State and Federal regulations, but also Jordan Valley Water's more stringent water quality goals. Figure 11 summarizes the capacity of our three treatment facilities and the production and cost for fiscal year 2023.

Figure 11. JVWCD Treatment Capacity and Production

	JVWTP	SERWTP	SWGWTP	TOTALS
General Information				
Rated capacity (MGD)	180.0	20.0	7.0	207.0
Capacity using standby power (MGD)	180.0	20.0	0.0	200.0
Maximum daily effluent flow (MGD)	133.6	19.8	2.8	156.2
Average daily flow during operation (MGD)	52.1	9.5	2.4	64.0
Percent of fiscal year in operation (%)	93.4	86.0	76.0	N/A
Plant Production				
Total volume into plant (AF)	66,751	10,651	3,107	**80,509**
Plant use and loss (AF)	306	409	1,296	**2,011**
Total volume into distribution (AF)	**66,445**	**10,238**	**1,911**	**82,520**
Direct Treatment O&M Costs				
Chemicals	$1,663,999	$353,500	$117,838	$2,135,336
Utilities	$361,394	$131,001	$265,547	$757,942
Personnel	$2,576,278	$660,547	$265,996	$3,502,820
Other Expenses	$101,582	$67,163	$143,146	$311,890
Plant Totals	**$4,703,253**	**$1,212,211**	**$792,527**	**$6,707,988**
Treatment O&M cost per acre-foot delivered to distribution system	**$70**	**$110**	**$180**	**$81**

Total Treated Water

Figure 12. JVWTP Total Treated Water (3 Years)

JVWTP is a conventional-process treatment plant with a rated capacity of 180 MGD. Its source water is conveyed from the Provo River at Olmsted Diversion, through the Jordan Aqueduct. Provo River water may also be diverted at the Murdock Diversion through the Provo River Aqueduct.

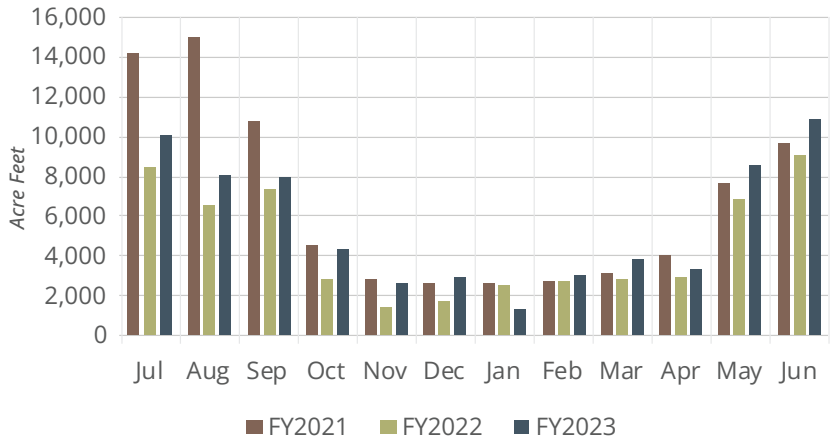


Figure 13. SERWTP Total Treated Water (3 Years)

With a rated capacity of 20 MGD, SERWTP uses high rate clarification to quickly settle suspended solids. Some water is conveyed through the Salt Lake Aqueduct from the intake located at Deer Creek Dam. The rest comes from runoff collected into the Draper Diversion from five mountain streams.

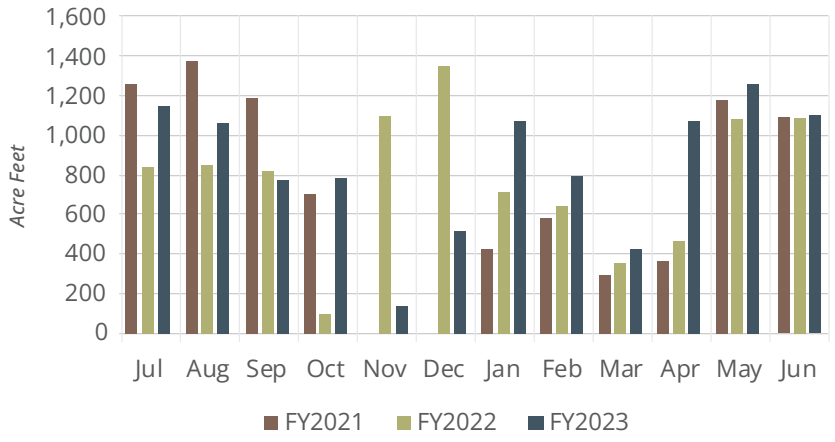
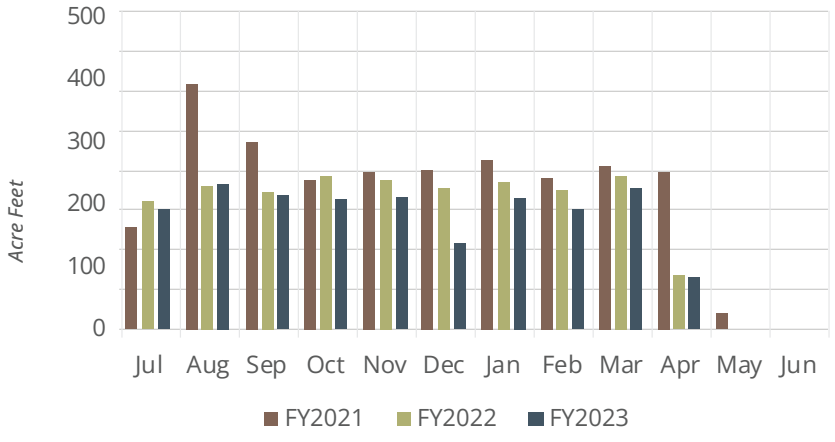
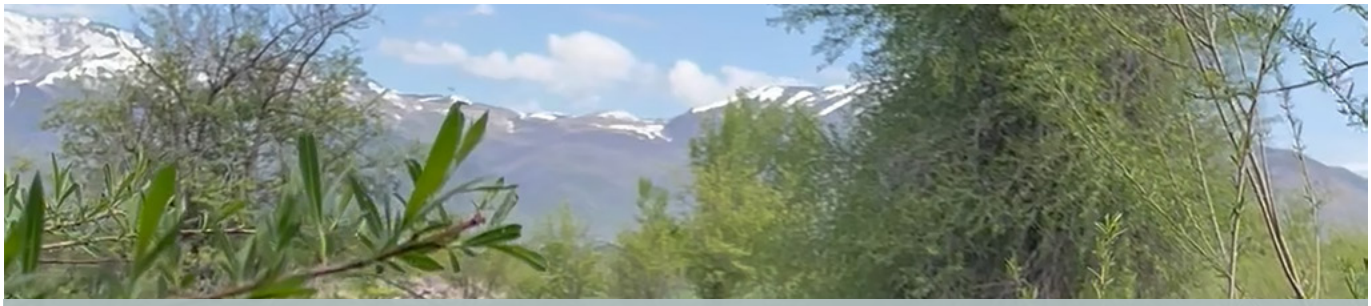


Figure 14. SWGWTP Total Treated Water (3 Years)

SWGWTP has a rated capacity of 7 MGD. This plant uses reverse osmosis technology to treat mining-contaminated groundwater.



Gaps in graph data indicate the plant was off-line.



Water Quality

Turbidity

Current regulations for surface water require combined effluent turbidity to be below 0.3 Nephelometric turbidity units (NTU) 95% of the time, and never exceed 1.0 NTU. There are also requirements for individual filters. The Partnership for Safe Water has set a finished water turbidity goal of 0.1 NTU. JVWCD has adopted even more stringent goals.

Figure 15.
JVWTP Turbidity

Max: 0.097
Average: 0.03
Min: 0.016
Goal Achieved: 98.90%
Record for consecutive days in operation below 0.08 NTU: 228
Current days of operation below 0.08 NTU: 148

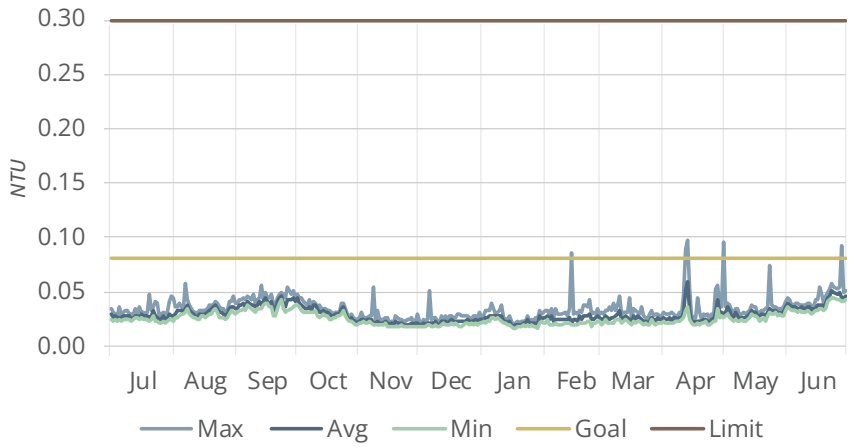


Figure 16.
SERWTP Turbidity

Max: 0.113
Average: 0.046
Min: 0.025
Goal Achieved: 95.36%
Record for consecutive days in operation below 0.08 NTU: 732
Current days of operation below 0.08 NTU: 298

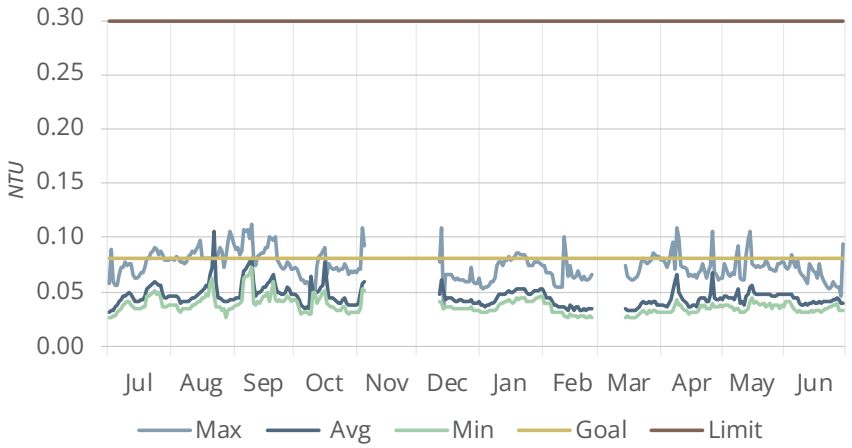
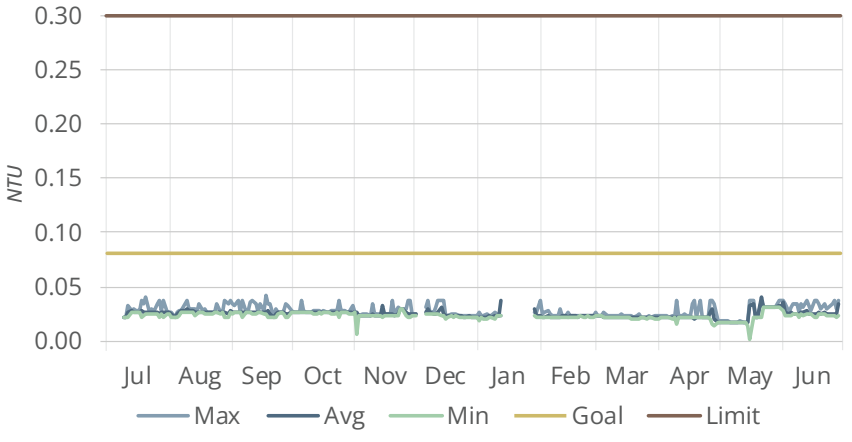


Figure 17.
SWGWTP Turbidity[1]

Max: 0.923
Average: 0.024
Min: 0.001
Goal Achieved: 87%
Record for consecutive days in operation below 0.08 NTU: 164 days
Current days of operation below 0.08 NTU: 7 days



1. SWGWTP does not currently treat surface water or groundwater under the influence of surface water, so turbidity requirements are less stringent than for JVWTP and SERWTP that do. This graph is shown for comparison purposes.

Chlorine Disinfection

The presence of chlorine residual in drinking water indicates that enough chlorine was added to the water to inactivate harmful bacteria and viruses. The residual also shows the water is protected from recontamination in the distribution system. While minimizing the chlorine concentration leaving the treatment plants helps control DBPs, it must be high enough to maintain a concentration of 0.2 mg/L throughout the distribution system.

Figure 18.
JVWTP CL Residual

Maximum residual: 1.50 mg/L
Average residual: 0.90 mg/L
Minimum residual: 0.27 mg/L
Goal achieved: 81.10%

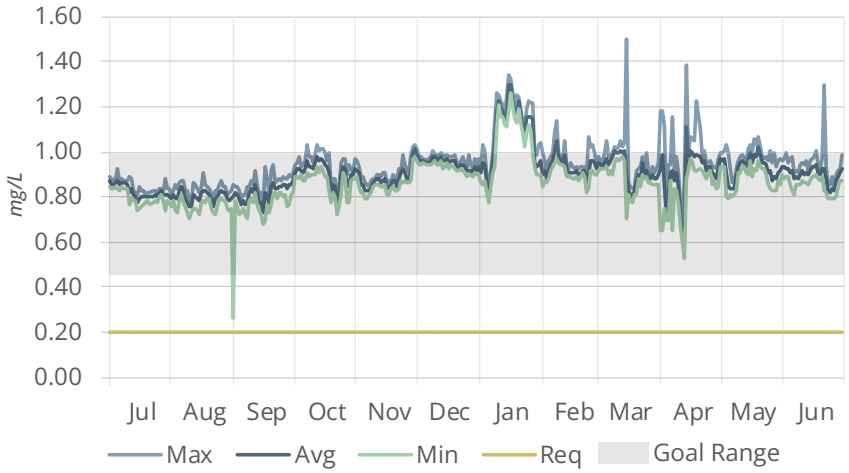


Figure 19.
SERWTP CL Residual

Maximum residual: 1.50 mg/L
Average residual: 1.03 mg/L
Minimum residual: 0.62 mg/L
Goal achieved: 96%

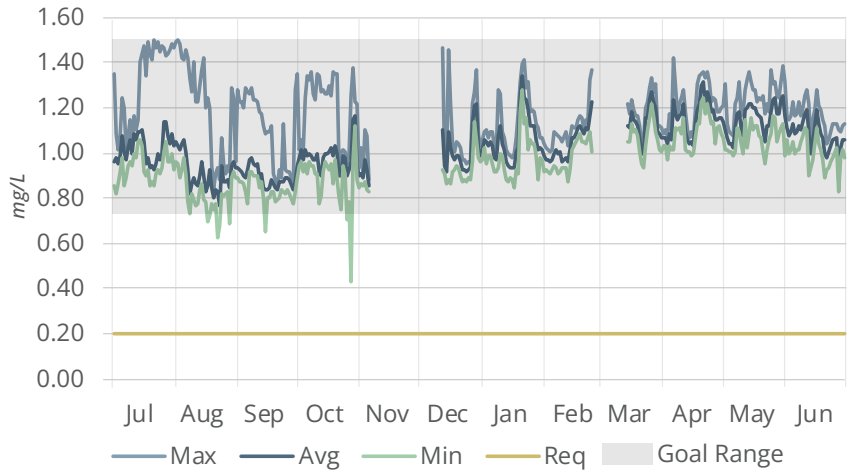
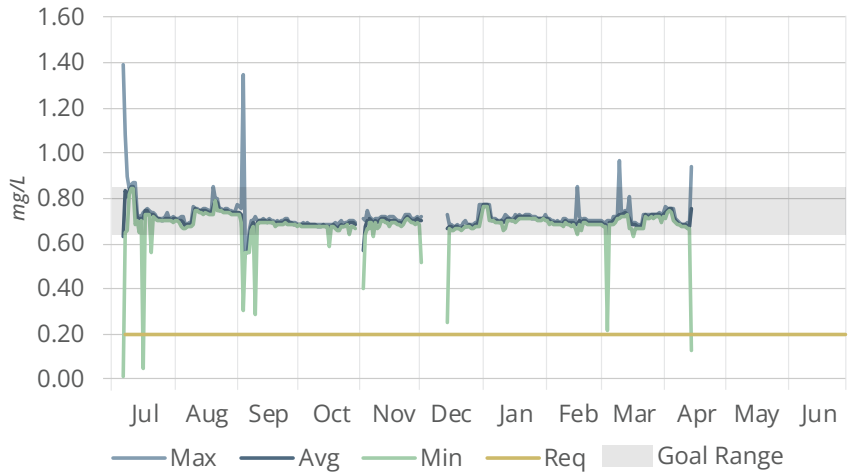


Figure 20.
SWGWTP CL Residual

Maximum residual: 1.39 mg/L
Average residual: 0.70 mg/L
Minimum residual: 0.02 mg/L[1]
Goal achieved: 97%



1. SWGWTP does not run continuously. The min value reflects the times the plant was put online.

Minimum CT Ratio

A CT value is the product of the concentration of chlorine and the contact time with the water. It is a measure of disinfection effectiveness which varies with water temperature, pH and disinfectant. Current regulations require sufficient CT to achieve 99.9% inactivation of Giardia and 99.99% inactivation of viruses. Compliance is determined by a CT ratio which compares the amount of CT achieved to the amount required. Any CT ratio above 1.0 meets regulations. Figures 21 and 22 show the minimum CT ratios at JVWTP and SERWTP.

Figure 21
JVWTP CT Ratio

Average CT Ratio: 6.11
Minimum CT Ratio: 1.93

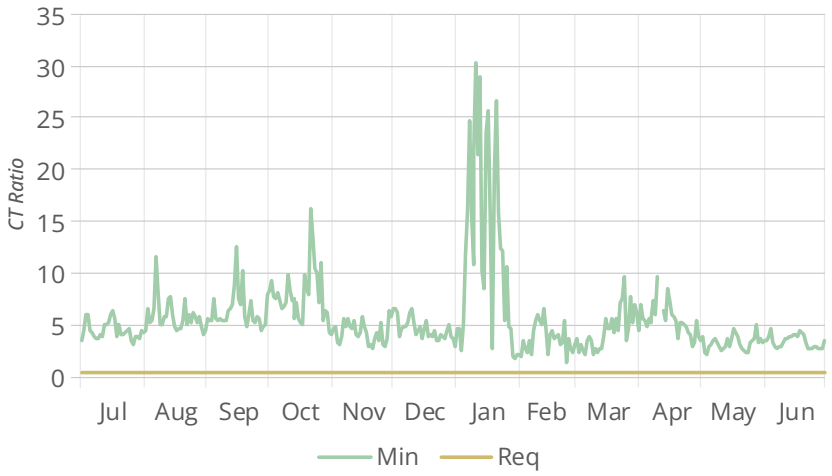


Figure 22.
SERWTP CT Ratio

Average CT Ratio: 4.05
Minimum CT Ratio: 1.46

Figure 23.
SWGWTP

Average CT: N/A
Minimum CT: N/A

SWGWTP does not report CT because groundwater not under the influence of any surface water is not required to report this measurement.

Disinfection By-Products

Disinfection by-products (DBPs) are compounds resulting from chemical reactions between organic and inorganic substances in water during water disinfection processes. DBP compliance is based on samples taken at points in the distribution system that represent where the highest level of DBPs are likely to occur. Figures 24 and 25 show the HHAs and THMs for the four quarters of fiscal year 2023 at eight distribution sites.

Figure 24. Compliance HAAs

Maximum Locational Running Annual Average: 22.0 ug/L

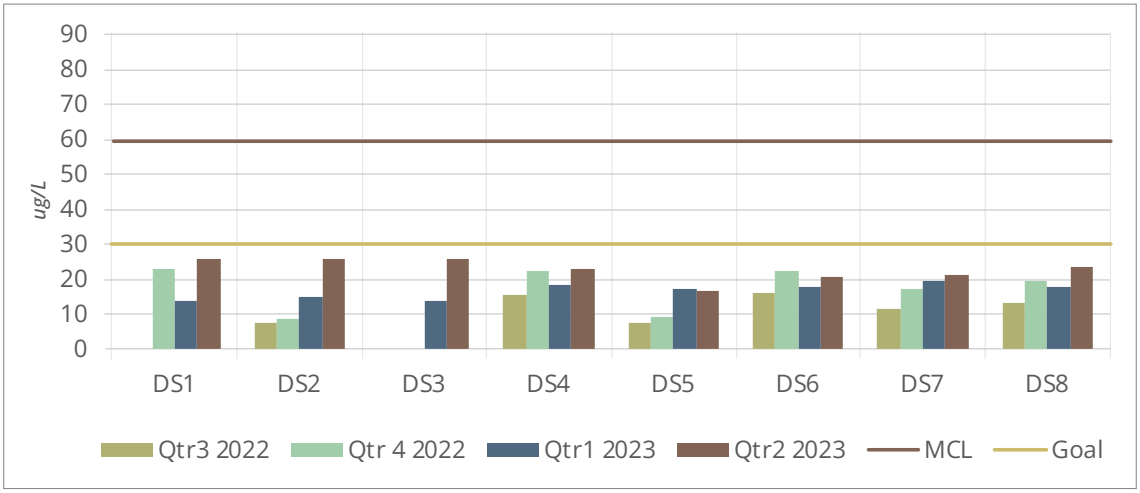
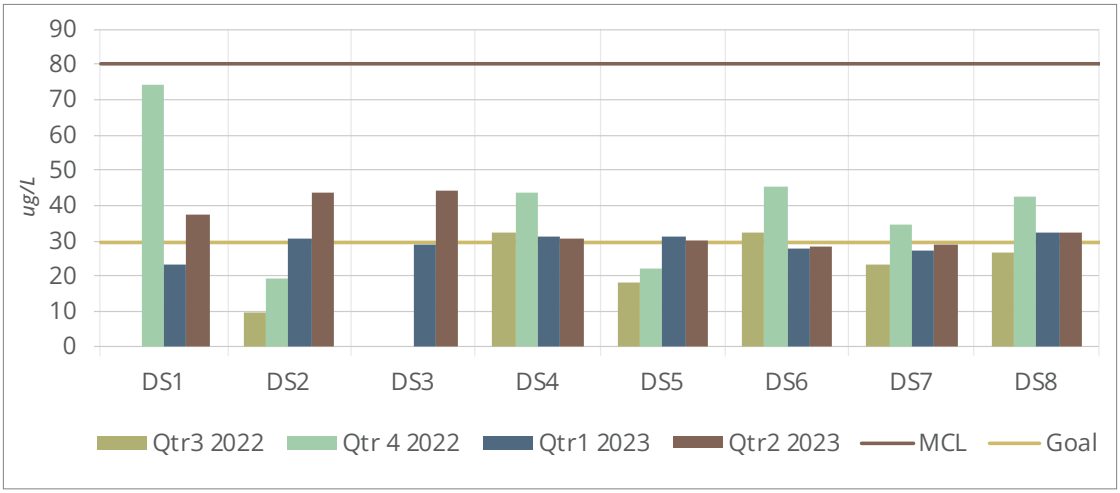


Figure 25. Compliance THMs

Maximum Locational Running Annual Average: 35.2 ug/L



Distribution Sites

DS1- 13800 S. Pony Express Rd.

DS2- 700 W. 11400 S.

DS3- 10730 S. 1300 E.

DS4- 3700 W. 2100 S.

DS5- 3610 S. 1000 W.

DS6- 6000 W. 4700 S.

DS7- 5700 W. 10200 S.

DS8- 13953 S. Lookout Peak Dr.

Coliform and Free Chlorine Residual Compliance

Figure 26 summarizes our compliance with the Revised Total Coliform Rule, the Groundwater Rule, and the Surface Water Treatment Rule requirements to maintain a disinfectant residual in the distribution system.

Figure 26. Coliform Samples and Free CL Residual

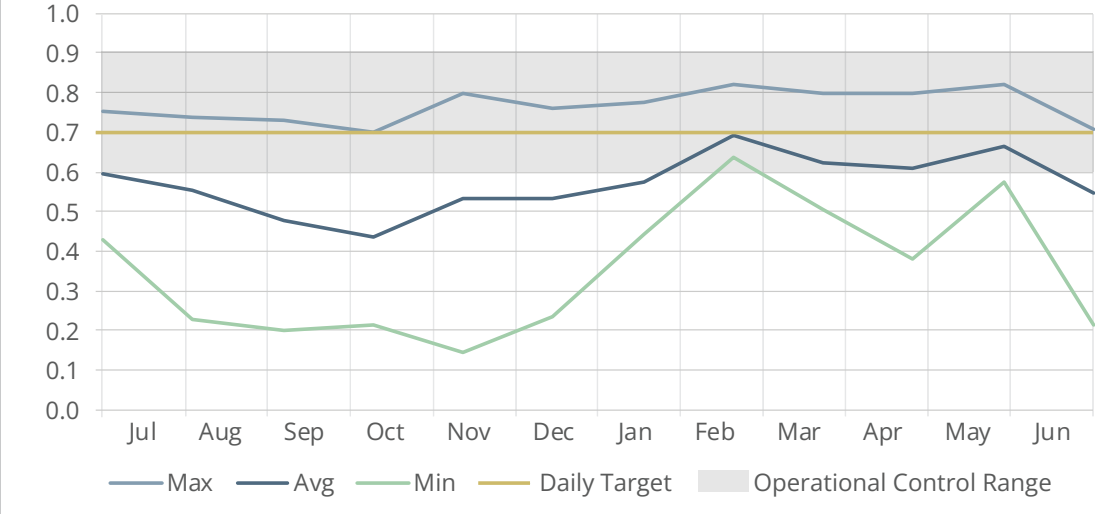
Month	# of Samples Analyzed[1]	# Total Coliform Positive	# Fecal Coliform Positive	# HPC Samples Taken	# GWR Samples Taken	Free Chlorine Residual (mg/L)		
						Avg.	Max.	Min.
July	118	0	0	3	0	0.74	1.16	0.00
August	131	0	0	0	0	0.63	1.00	0.14
September	124	0	0	1	0	0.66	1.11	0.22
October	122	0	0	3	5	0.71	1.12	0.04
November	102	0	0	0	0	0.67	1.02	0.14
December	100	0	0	2	0	0.70	1.09	0.04
January	119	0	0	0	0	0.80	1.50	0.17
February	110	0	0	0	0	0.78	1.13	0.12
March	115	0	0	0	0	0.74	1.27	0.19
April	110	0	0	0	0	0.78	1.35	0.23
May	111	0	0	0	0	0.83	1.34	0.17
June	107	0	0	1	0	0.75	1.30	0.02
Totals	**1369**	**0**	**0**	**10**	**5**			

1. Number of samples collected and tested depends on the population served.

Fluoride

Fluoride is regulated county-wide by Salt Lake Valley Health Department. Compliance is based on a system-wide annual average with a daily average target of 0.7 mg/L staying within the Operational Control Range of 0.6-0.9 mg/L.

Figure 27. System-Wide Fluoride Concentration (mg/L)



Total Samples Collected

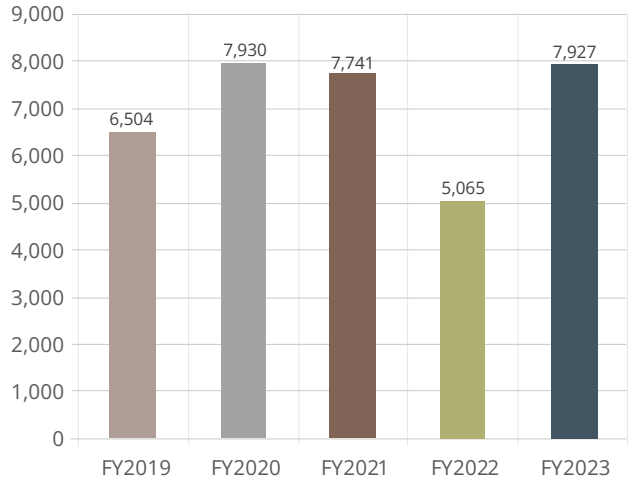
Sampling sites include JVWTP, SERWTP, SWGWTP, distribution system, mountain streams, Jordan and Provo Rivers, and various sites in response to customer calls. Data includes samples collected by Operations and Water Quality Section personnel. Figure 28 shows a breakdown of samples collected in fiscal year 2023. Figure 29 shows annual totals for the past five fiscal years.

Figure 28. Samples Collected

Parameter	No. of Samples Collected
Coliform	1,626
Quantitray	17
Giardia/Cryptosporidium	0
Heterotropic Plate Count	10
DBPs	278
Calcium	21
Total Organic Carbon	272
Alkalinity	207
UV 254	286
Inorganics and metals	11
Nitrate	10
Fluoride	769
Hardness, Total	23
Chlorite	36
VOCs	4
Pesticides	13
Color	34
Geosmim and MIB	75
Field Tests	3,673
TDS	215
Sludge	2
Low Level Mercury	14
Radionuclides[1]	4
TSS and Selenium	108
Complete Inorg. Source	145
Pharmaceuticals / PCPs	22
Other[2]	52
Total	**7,927**

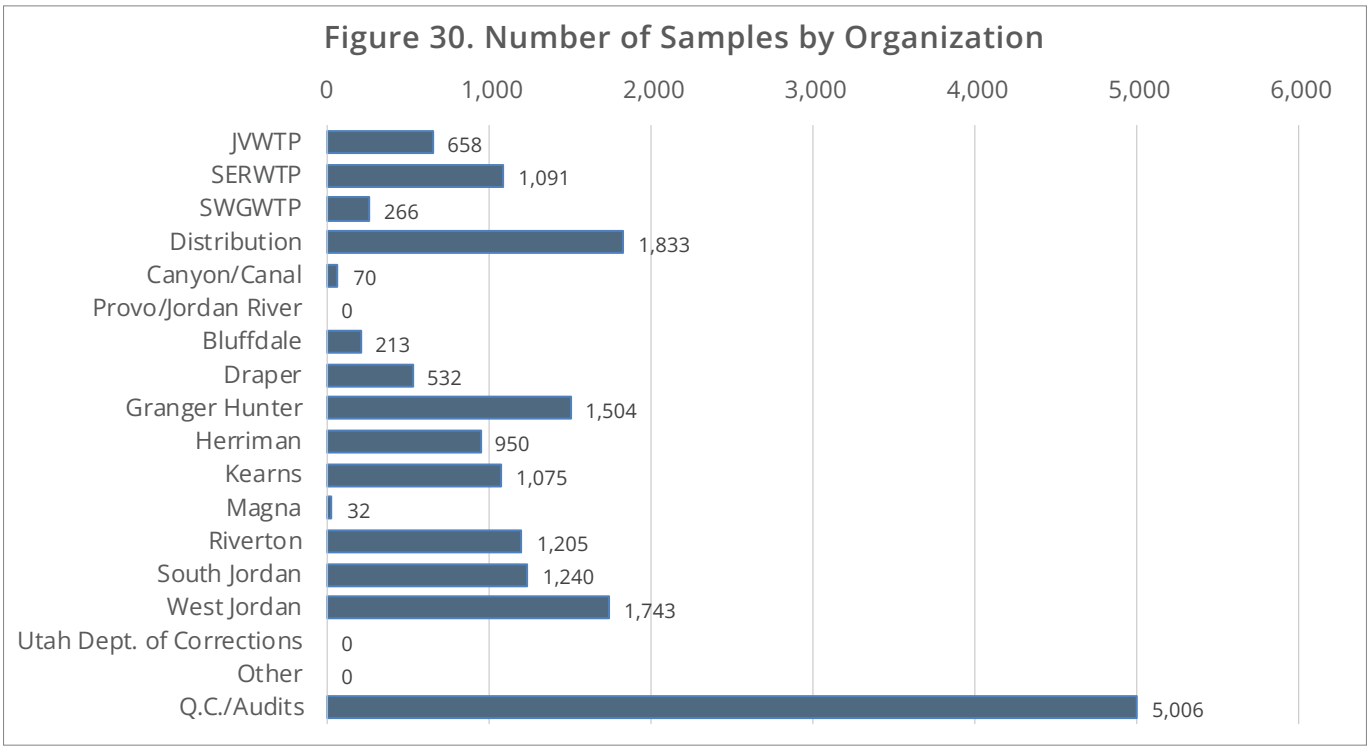
1. Radium 226 and 228, Gross Alpha, Gross Beta
2. Nitrite sample for injection activity and sludge sample

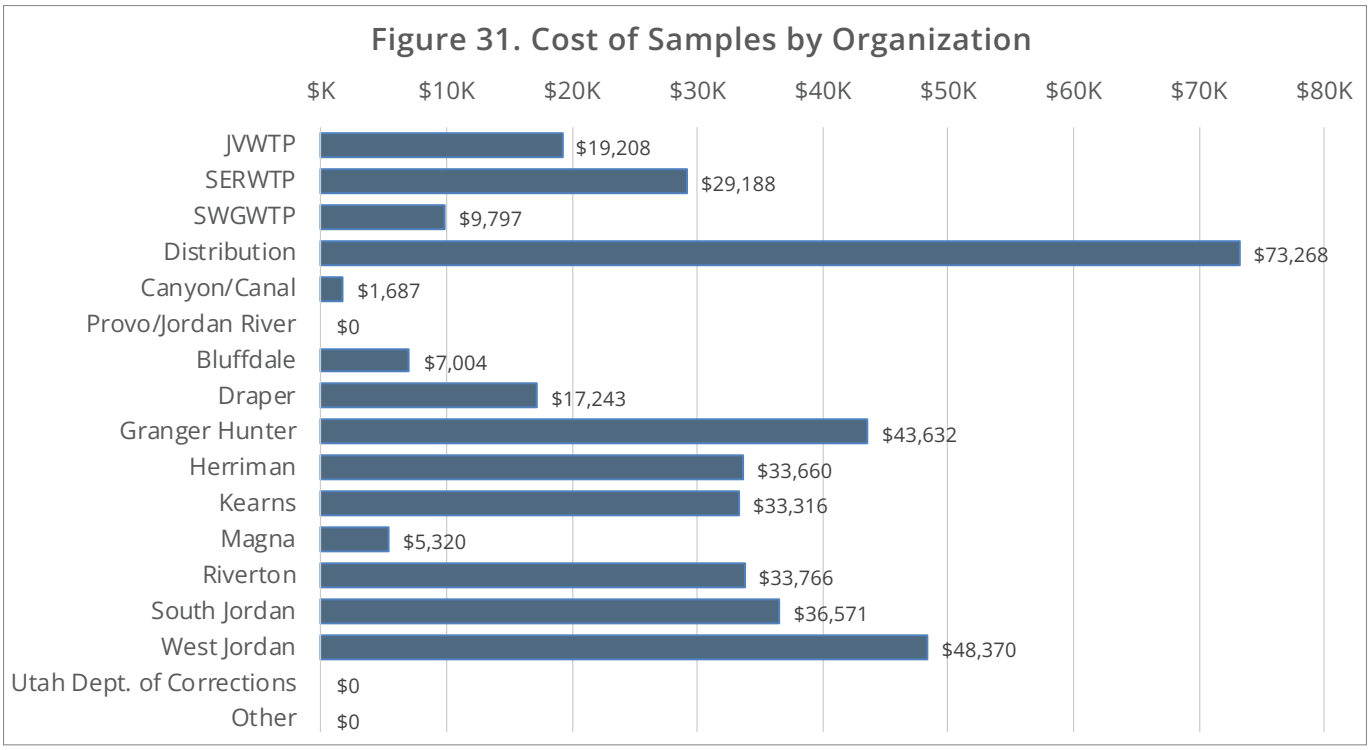
Figure 29. Samples Collected (5 Year)



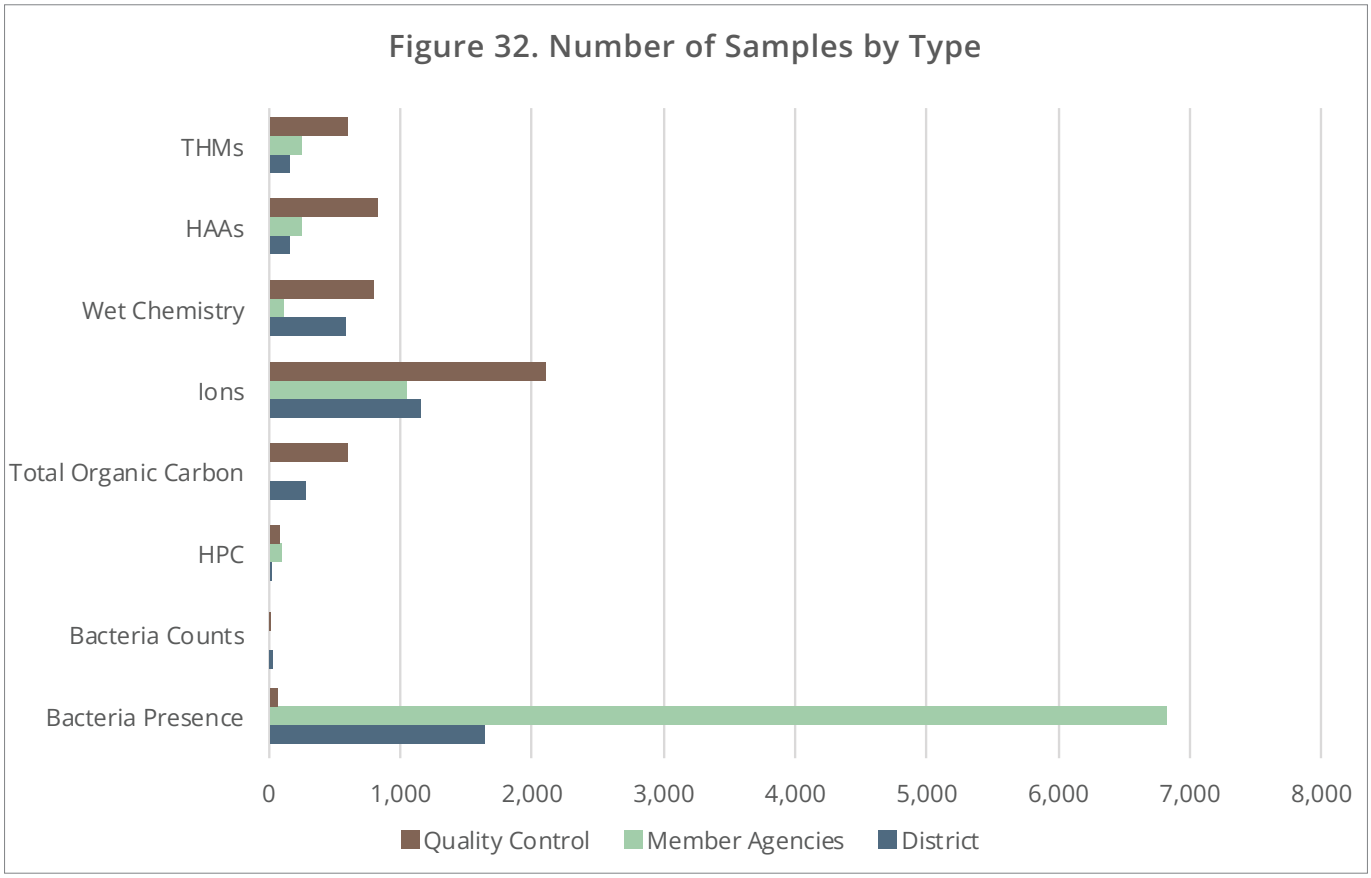
Jordan Valley Laboratory

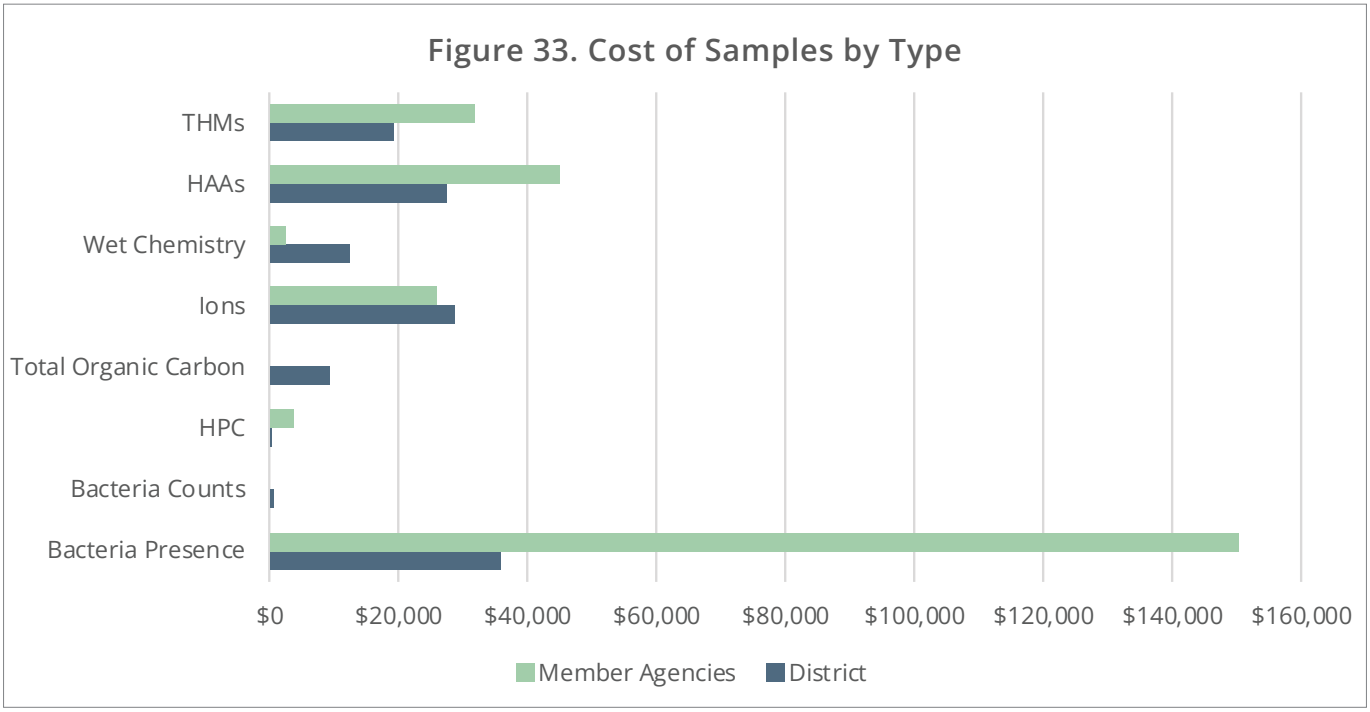
The Jordan Valley Laboratory provides analytical services and general support for the District. This allows the District to lower the budget required for outside analysis and provide customized service. The lab also provides analytical services for many of the District's member agencies at discounted prices. Figures 30 and 31 show the number of samples analyzed and their value separated by organization. Figures 32 and 33 show the number of samples analyzed and their value separated by sample type.





Jordan Valley Laboratory *(cont.)*





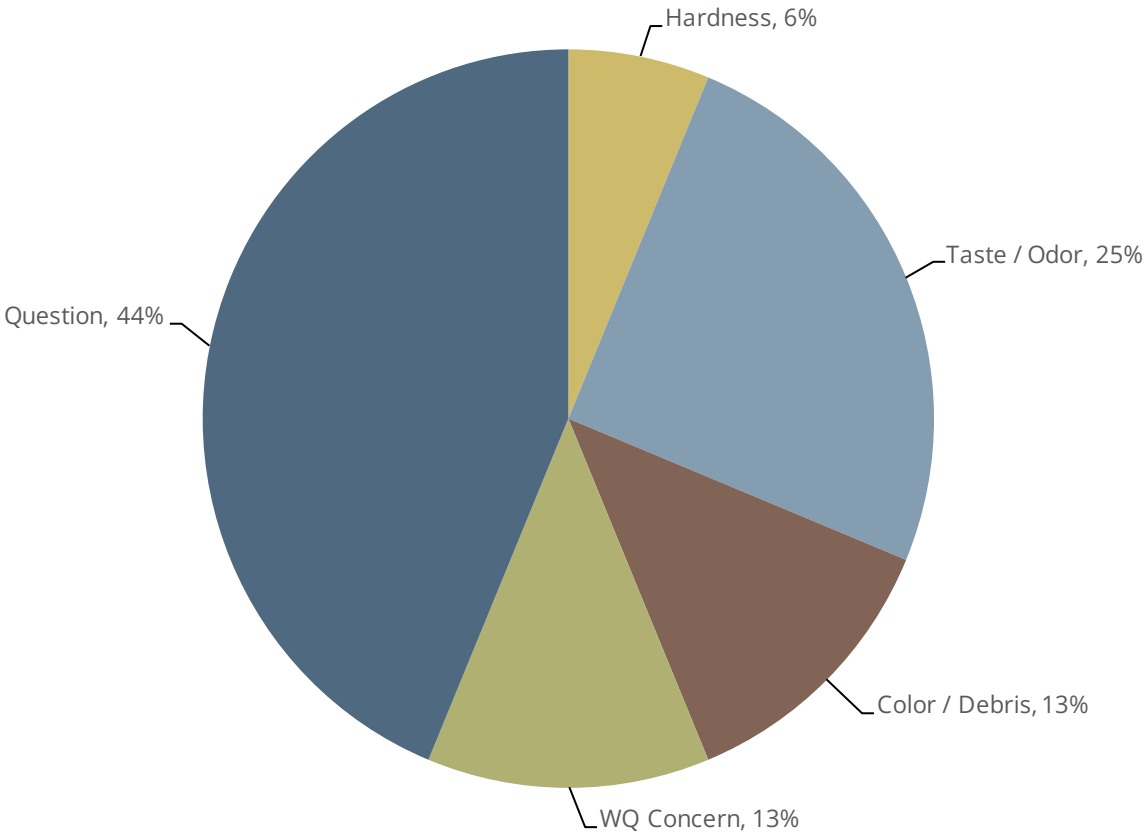
Water Quality Customer Service

The public perceives water quality as the look, taste and feel of their water. These calls are logged and tracked in a database, which allows us to determine response time and trends. Figures 34 and 35 summarize of the types of calls received.

Figure 34. Water Quality Calls by Type

Type of Call	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Totals
Cross Connection	0	0	0	0	**0**
Hardness	0	0	1	0	**1**
Taste/Odor	0	1	3	0	**4**
Color/Debris	0	1	0	1	**2**
WQ Concern	0	0	2	0	**2**
Question	3	2	0	2	**7**
Total	**3**	**4**	**6**	**3**	**16**

Figure 35. Water Quality Calls by Type (%)



Water Pumping and Storage

Groundwater

Runoff water from the Wasatch Mountains is captured and stored naturally in the underground aquifer. Jordan Valley Water extracts this groundwater through the operation of multiple wells primarily located in the southeast portion of Salt Lake Valley. Groundwater accounts for about 10% of our total supply and is most heavily utilized to supplement our surface water sources in the summer when demands are high and during drought periods and surface water sources need to be preserved. Figure 36 shows a breakdown of groundwater production by location for fiscal year 2023 and a comparison of totals for the past three fiscal years.

Figure 36. Groundwater Well Production (FY2023 and 3 Years)

Location	Design Capacity (cfs)	Well Setting Level (ft)	Emergency Back-up Capacity (cfs)	Avg. Flow Rate (cfs)	Days Operated	Annual Production (AF)			Total Power Cost	Avg. Cost/AF	Water Level (ft Above Pump)		
						FY2023	FY2022	FY2021			Max	Min	Avg
275 E. Carol Way	2.9	460	-	0.0	0	0	352	33	$5,674	$0	365	307	340
300 E. 4500 S.	0.7	200	-	0.0	0	0	0	0	$0	$0	-	-	-
1028 E. College Dr.	4.0	400	-	0.0	0	0	261	208	$3,139	$0	361	0	158
1155 E. Webster Dr.	6.5	465	-	0.0	0	0	0	1,094	$4,108	$0	180	131	160
1159 E. 4500 S.[1]	2.2	282	-	1.2	74	183	22	142	$11,972	$65	260	29	199
1200 E. 9400 S.	1.8	480	-	0.0	0	0	0	0	$1,696	$0	249	68	155
1307 E. 6860 S.	4.7	322	-	4.8	137	1,303	746	965	$55,788	$43	191	31	131
1364 E. 6400 S.	6.0	265	6	2.6	40	208	1,372	105	$25,528	$123	347	36	171
1500 E. 9400 S.[1]	9.5	640	-	9.0	82	1,459	2,560	533	$128,745	$88	182	76	150
1526 E. 8600 S.	8.5	580	-	8.5	74	1,252	1,545	506	$129,244	$103	198	35	152
1530 W. 14600 S.	4.5	150	-	3.8	19	143	86	0	$11,408	$80	149	86	144
1600 E. Siesta Dr.[1]	9.6	422	-	7.3	107	1,551	1,579	382	$132,525	$85	218	38	159
1784 E. Creek Rd.	7.1	700	-	7.1	123	1,721	1,121	1,963	$146,091	$85	406	114	317
1787 E. Creek Rd.	5.0	177	-	0.0	0	0	0	0	$2,134	$0	160	157	160
1850 E. Newbury Dr.	8.9	620	8.9	6.1	58	699	1,219	837	$68,669	$98	251	111	225
2090 E. 8600 S.	2.5	520	-	0.0	0	0	0	0	$4,816	$0	173	70	106

(-) Indicates not applicable or data not available

1. Corresponds to the wells in Figure 41. Aquifer Recovery Levels.

Groundwater *(Cont.)*

Location	Design Capacity (cfs)	Well Setting Level (ft)	Emergency Back-up Capacity (cfs)	Avg. Flow Rate (cfs)	Days Operated	Annual Production (AF)			Total Power Cost	Avg. Cost/AF	Water Level (ft Above Pump)		
						FY2023	FY2022	FY2021			Max	Min	Avg
2300 E. 9800 S	4.1	760	-	0.0	0	0	0	0	$6,053	$0	161	161	161
2400 E. Creek Rd.	2.8	440	-	2.3	139	623	536	380	$21,543	$35	95	58	80
4670 S. 1590 E.	3.8	450	-	1.9	12	46	0	168	$7,298	$158	437	1	392
7700 S. 700 E.[1]	5.6	375	-	3.9	82	628	0	0	$47,154	$75	269	87	190
7750 S. 1000 E.	3.1	401	-	1.7	31	106	240	23	$9,617	$91	231	0	170
7751 S. 1300 E	4.0	402	-	0.0	0	0	243	0	$979	$0	175	86	136
8148 S. 1330 E.	7.0	505	-	6.7	104	1,392	885	1,073	$126,987	$91	251	42	180
8200 S. 1000 E	2.0	356	-	0.0	0	0	0	0	$188	$0	197	121	167
8201 S. 700 E.	2.2	444	-	2.0	24	98	474	299	$3,449	$35	270	60	236
8518 S. 960 E.	6.0	460	-	4.4	57	497	391	0	$62,484	$126	255	24	209
8578 S. Monitor Dr.	8.0	530	8	0.0	0	0	1,264	1,042	$6,680	$0	180	117	155
8651 S. 1300 E.	4.0	550	-	0.0	0	0	0	0	$170	$0	170	170	170
9003 S. Quail Hollow	2.2	800	-	2.0	62	241	442	414	$25,965	$108	213	32	176
9125 S. 500 West	2.0	150	-	0.0	0	0	0	0	$1,655	$0	-	-	-
9390 S. Solena Way	4.8	635	-	4.1	71	582	885	52	$51,188	$88	126	52	106
Prison Well[2]	0.9	-	-	0.5	15	15	65	122	$0	$0	-	-	-
Totals	**146.0**					**12,733**	**16,225**	**10,218**	**$1,102,949**	**$1,577**			

2. Owned by the Utah Department of Facilities & Construction Management (not included in Totals and Averages). Power costs paid by the Utah Department of Facilities & Construction Management.

ASR Operations

Jordan Vally Water operates a flow control/pump station at 10800 S. 1300 E. The station is located on the 30-inch pipeline on 1300 E. between 11400 S. and 9400 S. This pipeline and station allow Jordan Valley Water to convey water from its treatment plants to areas that previously received well water or water purchased from Metropolitan Water District of Salt Lake and Sandy.

Any water from the treatment plants serving areas north through this station is considered "saved water" in Jordan Valley Water's conjunctive management agreement with Central Utah Water Conservancy District. Figure 37 shows the water produced and saved for FY2023.

Figure 37. 10800 S. 1300 E. Pump Station

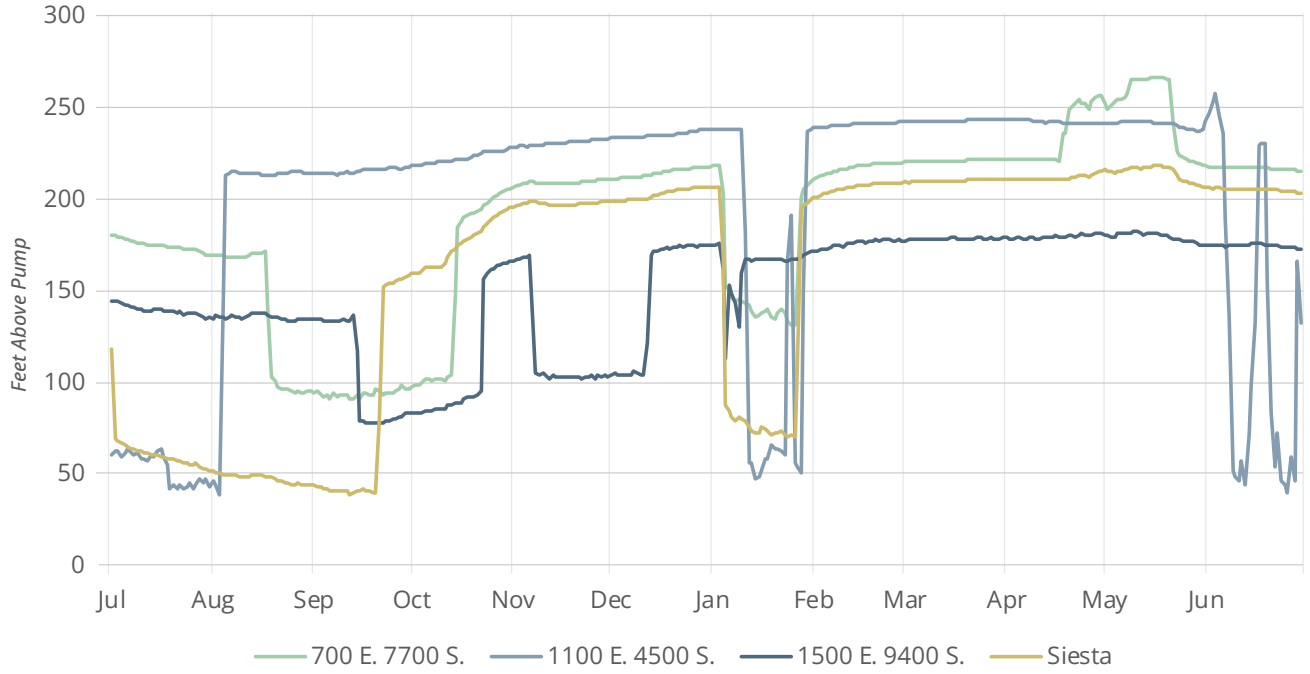
	Injected for Underground Storage (AF)	10800 S. (North Flow) (AF)	Total (AF)	Net Saved (AF)	Total Well Production (AF)
July	0.00	0	0	0	2,633.02
August	0.00	0	0	0	3,177.47
September	0.00	0	0	0	2,678.65
October	0.00	45.27	45.27	45.27	1,119.91
November	0.00	21.43	21.43	21.43	651.02
December	0.00	197.4	197.4	197.4	458.47
January	0.00	633.39	633.39	633.39	1,124.95
February	0.00	505.94	505.94	505.94	0.00
March	0.00	220.16	220.16	220.16	139.03
April	161.42	567.52	728.94	567.52	101.95
May	379.25	836.48	1,215.74	836.48	142.97
June	233.70	823.49	1,057.20	823.49	506.01
Totals	**774.37**	**3,851.10**	**4,625.47**	**3,851.10**	**12,733.43**

ASR Operations *(Cont.)*

Monitoring and reporting for the Aquifer Storage and Recovery (ASR) project is regulated by the Division of Water Quality's Underground Injection Control permitting process. The water injected at each of the injection wells comes from either the JVWTP or SERWTP and meets all drinking water regulations since the water is injected directly from the distribution system.

Figure 38 shows a year's sample of groundwater levels at four of Jordan Valley Water's wells. We have been monitoring well levels to see if the aquifer is recovering each year. Natural recovery occurs in the winter, with more drawdown in the summer.

Figure 38. Aquifer Recovery Water Levels



Booster Pumps

The District operates multiple booster pumps to ensure proper pressure throughout the various pressure zones within the transmission/distribution system.

Figure 39. Booster Pump Operational Information (FY2023 and 3 Years)

Zone (SCADA ID)	Location	Capacity (cfs)	Emergency Back-up Capacity (cfs)	Total HP	Average Dynamic Lift (ft)	Total Pumped (AF)	Total Capacity (cfs)	Avg. Flow Rate (cfs)	Volume Pumped (AF)			Total Power Cost	Avg. Cost/ AF	Days in Operation
									FY2023	FY2022	FY2021			
A So. (N/A)	4706 Naniloa Dr.	12	-	300	-	0.00	12.0	0.00	0	0	0	$2,593	$0	0
B E. (3)	110 E. 11400 S.	28	8	1200	320	25001	242.8	0.00	0	0	301	$8,963	$0	0
B No (4)	3600 W. 10200 S.	44	5.0[1]	2000	350			6.82	4937	4523	5883	$139,436	$28	191
B No. (14)	3145 W. 11400 S.	42	9.3[1]	900	110			2.11	1524	0	4201	$15,451	$10	83
B No. (6)	4500 S. 4800 W.	63.8	14	1625	200			8.71	6309	6868	7172	$116,063	$18	335
B No. (6)	5820 S. 3800 W.	24	14[1]	650	180			3.50	2535	2655	3985	$68,078	$27	188
B No. (6)	6200 S. 3200 W.	41	12	1500	180			13.39	9696	8359	16441	$163,923	$17	364
C E. (3)	10730 S. 1300 E.	22	-	400	100	18321	147.8	4.17	3016	5014	1111	$46,110	$15	116
C So. (2)	3200 W. 11800 S.	55	17.8	3900	495			11.52	8342	8063	10254	$355,546	$43	340
C So. (2)	5700 W. 10200 S.	22.8	-	750	240			2.49	1806	1888	2717	$56,387	$31	172
C So. (2)	13400 S. 3300 W.	40	10.0[1]	2400	495			7.12	5157	3968	6921	$285,704	$55	362
C So. (N/A)	15305 S. 3200 W.	8	4	400	280			0.00	0	0	0	$0	$0	0
D So. (1)	6924 Old Bingham Hwy	25	12	800	280	1698	25.0	2.35	1699	1824	1754	$77,031	$45	211
Totals/Averages		**427.6**	**106.1**	**16,825**	**269**			**62.19**	**45,021**	**43,161**	**60,740**	**$1,335,286**	**$290**	**2,362**

1. Requires portable generators

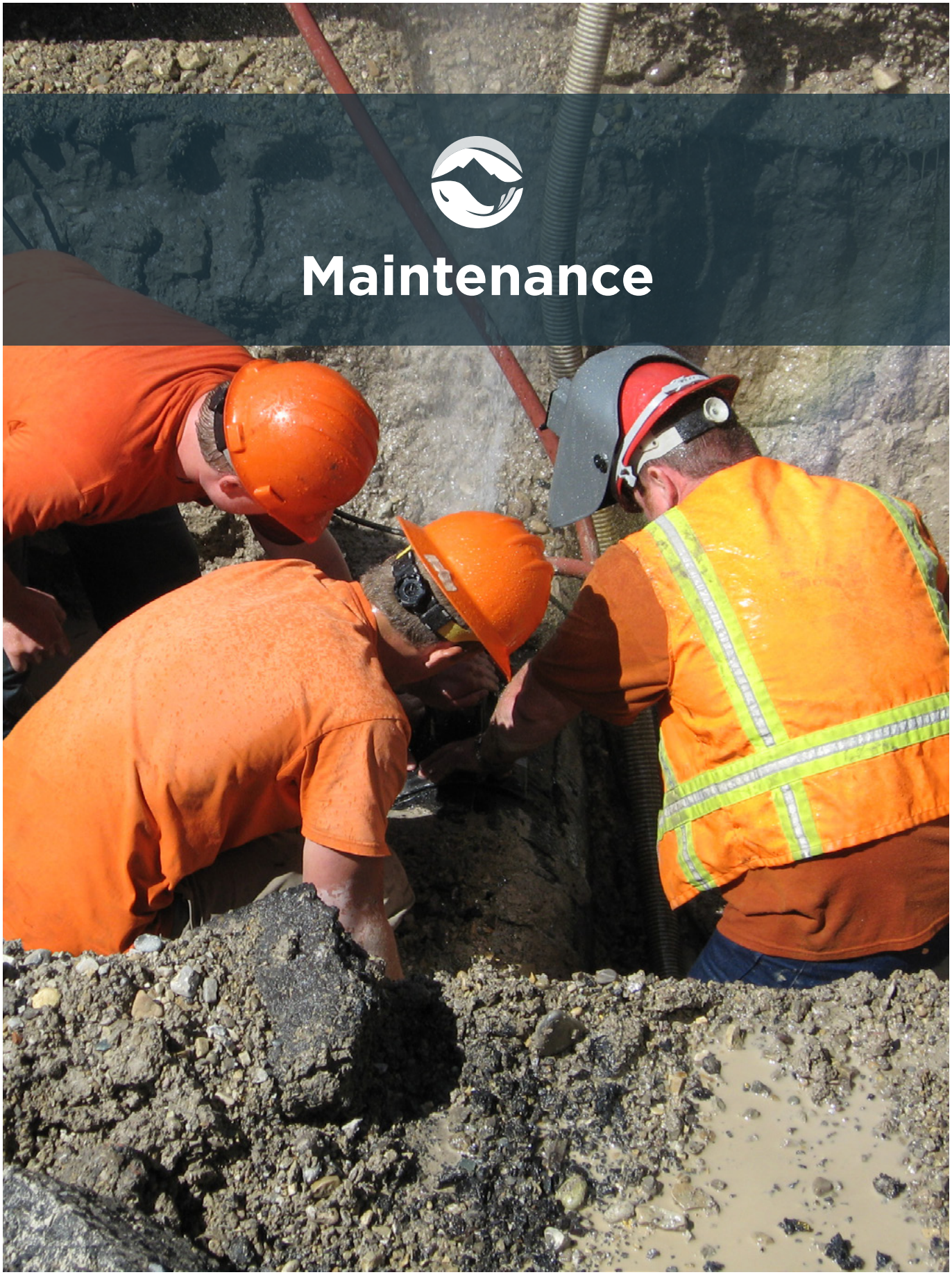
System Storage

Finished water reservoirs are designed to equalize water demands and reduce pressure fluctuations in the distribution system. They also provide reserves for firefighting, power outages, and other emergencies. Operation of these reservoirs is critical for optimizing water deliveries and managing water quality. Annual inspections and cleaning are important to protect against corrosion and make needed repairs to prolong the life of these facilities. Figure 40 shows a summary of the District's storage facilities by type and year built as of fiscal year 2023.

Figure 40. System Storage Summary

Address (Informal)	Size	Type	Yr. Built	Last Inspected	Elevation (ft)	
					Floor	Overflow
14445 S. Minuteman Dr. (Prison)	0.4 MG (W)	Concrete	1950	2018	4640	4652
	0.2 MG (E)	Concrete	1930	2021		
11574 S. Wyndcastle (SERWTP)	1 MG	Concrete	1983	2021	4992	5012
	3 MG	Concrete	2003	2021	4994	5016
15305 S. 3200 W. (JVWTP)	1 MG	Concrete	1974	2022	4967	4983
	8 MG	Concrete	1974	2019	4703	4725
	1 MG	Steel	1974	2019	4773	4805
	12.5 MG	Concrete	2016	2021	4703	4724
14408 S. 5600 W. (Rosecrest)	3 MG	Concrete	2000	2021	5120	5148
3815 W. 5820 S. (Terminal)	16.5 MG	Concrete	1984	2021	4580	4610
	16.5 MG	Concrete	1984	2022		
	33 MG	Concrete	1997	2021		
	33 MG	Concrete	1997	2023		
7986 W. New Bingham Hwy. (Zone D Basins 1 and 2)	3 MG (N)	Concrete	2008	2022	5355	5375
	3 MG (S)	Concrete	2008	2022		
2718 E. Durban Rd. (2300 E. 9400 S.)	1 MG	Steel	1956	2021	4936	4968
	2 MG	Steel	1964	2021		
9785 S. Eastdell Dr. (2300 E. 9800 S.)	6 MG	Concrete	1970	2022	4942	4968
4772 S. Naniloa Dr. (Casto Reservoir)	2 MG	Concrete	1962	2021	4588	4608
6171 S. 3200 W. (32 and 62)	8 MG	Steel	1968	2023	4565	4605
	2 MG (E)	Steel	1961	2021		
	2 MG (W)	Steel	1964	2021		
5211 W. 6200 S. (52 and 62)	2 MG	Concrete	1962	2021	4720	4740
6011 W. 4700 S. (60 West)	1 MG	Steel	1956	2020	4708	4740
	2MG	Concrete	1962	2021	4720	4740
	6 MG	Concrete	1966	2019	4714	4740
4408 S. 4800 W. (48 and 45)	1 MG	Steel	1956	2021	4458	4498
	2 MG	Steel	1956	2021		
	5 MG (E)[1]	Steel	1965	2023		
	5 MG (W)	Steel	1969	2014		
3582 W. 10200 S. (36 and 102)	3 MG	Concrete	1981	2022	4635	4663
5705 W. Old Bingham Hwy. (57 and 102)	3 MG	Concrete	1981	2022	4931	4959
6898 W. Old Bingham Hwy. (Old Bingham)	3 MG	Concrete	1976	2019	5128	5148

1. Tank has been sold to GHID and physical disconnection from JVWCD system is pending completion of a GHID construction project.



Maintenance

Preventive vs. Reactive Maintenance

By focusing on planned, predictive, and preventive maintenance (PM), Jordan Valley Water is reducing unscheduled downtime and avoidable failures that significantly increase costs and reduce reliability of equipment and services. Part of this effort is to ensure staff follow all manufacturer recommended PM programs and complete this critical work on time: within 30 days of the assigned due date. The District schedules and tracks all its PM and has a goal of completing at least 95% of this work on time.

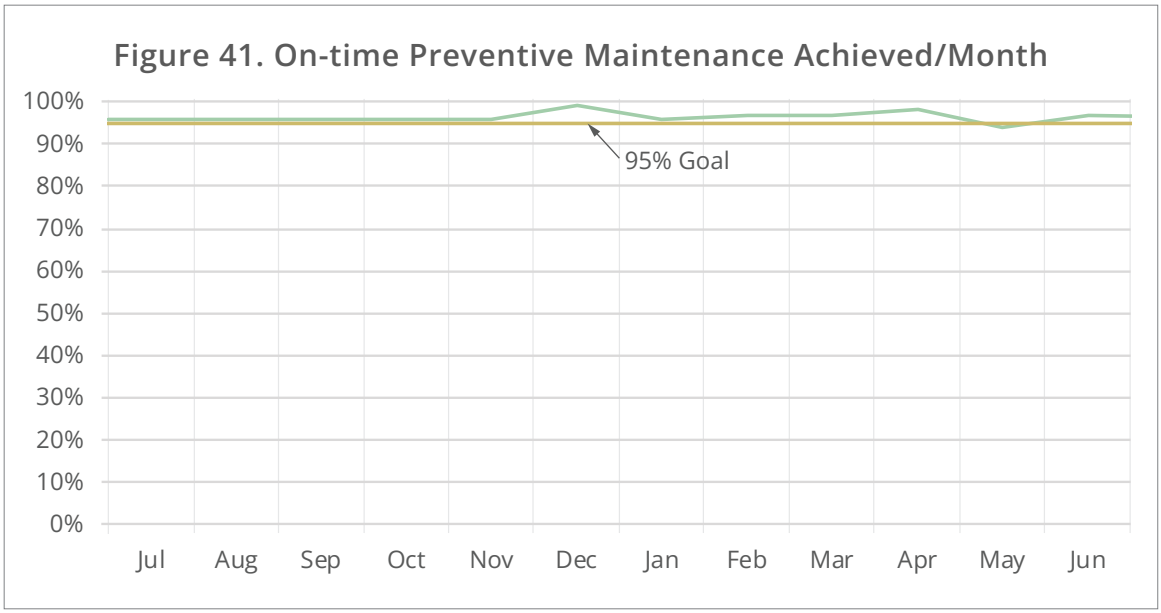
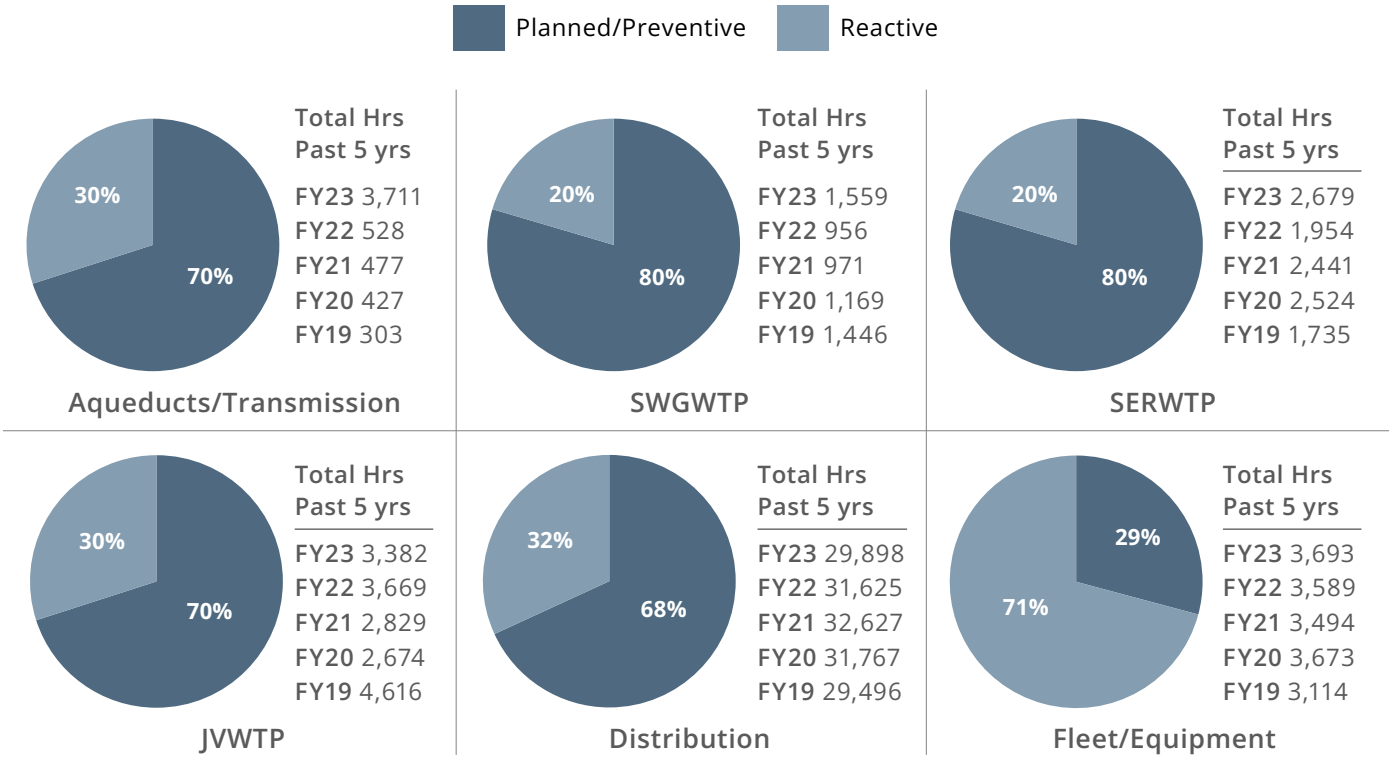


Figure 42. Planned/Preventive vs Reactive Maint. Work Orders



Vehicle Summary

The District maintains a fleet of 66 vehicles. Figures 43 and 44 summarize each division's vehicle use over the past year and then the totals over the past five years for comparison.

Figure 43. Vehicle Maintenance Summary

Division/ Department	No. of Vehicles Assigned	Fuel Used (Gal.)	Miles Driven	Average MPG	Fuel/Fee Costs	Maint Costs FYT
Maintenance	36	33,663	310,675	9.2	$125,182	$18,745
Information Systems/ Electronics & Instrumentation	7	5,690	71,666	12.6	$19,204	$785
Operations	19	10,193	164,038	16.1	$34,624	$3,300
Administration/Engineering/ Conservation	6	1,621	36,405	22.5	$5,548	$1,071
Total	**68**	**51,167**	**582,784**	**15.1**	**$184,558**	**$23,901**

Figure 44. Vehicle Maintenance Totals (5 Years)

Fiscal Year	Fleet Size	Fuel Used (Gal.)	Miles Driven	Average MPG	Fuel/Fee Costs	Maint Costs FYT
FY2023	68	51,167	582,784	11.4	$184,558	$23,902
FY2022	66	50,464	565,450	11.2	$154,583	$30,754
FY2021	72	58,456	639,491	10.9	$117,272	$26,882
FY2020	65	49,625	542,740	10.9	$126,036	$37,785
FY2019	66	50,840	555,974	10.9	$138,670	$36,943
Five-year Average	**67**	**52,110**	**577,288**	**11.06**	**$144,224**	**$31,253**

Mainline Breaks

Jordan Valley Water works hard to maintain, rehabilitate, or replace distribution and transmission pipelines as necessary to maintain a high level of water service and system reliability while still achieving a full, useful life of every water main. A goal, as seen in Figure 47, has been set to reduce and keep the number of breaks incurred each year to a more manageable/acceptable level.

Figure 45. Mainline Breaks/Month (3 Years)

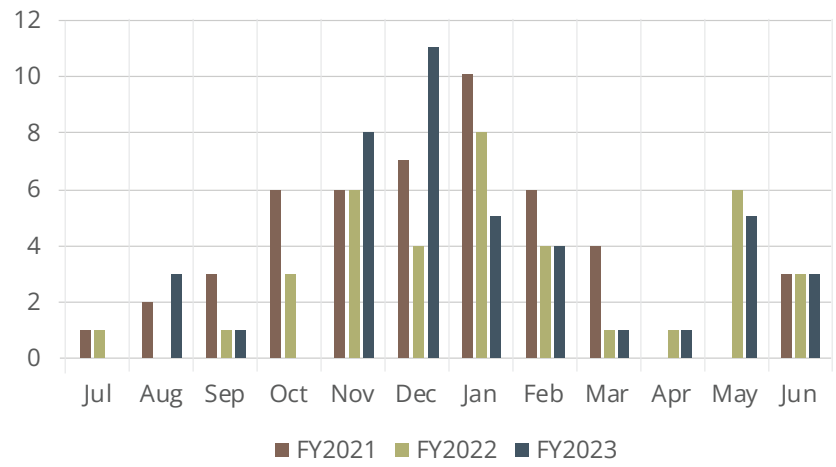


Figure 46. Mainline Breaks/Year (5 Years)

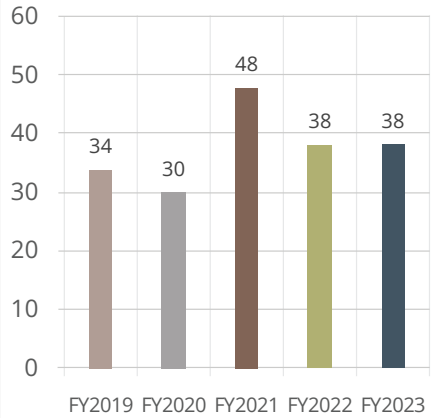
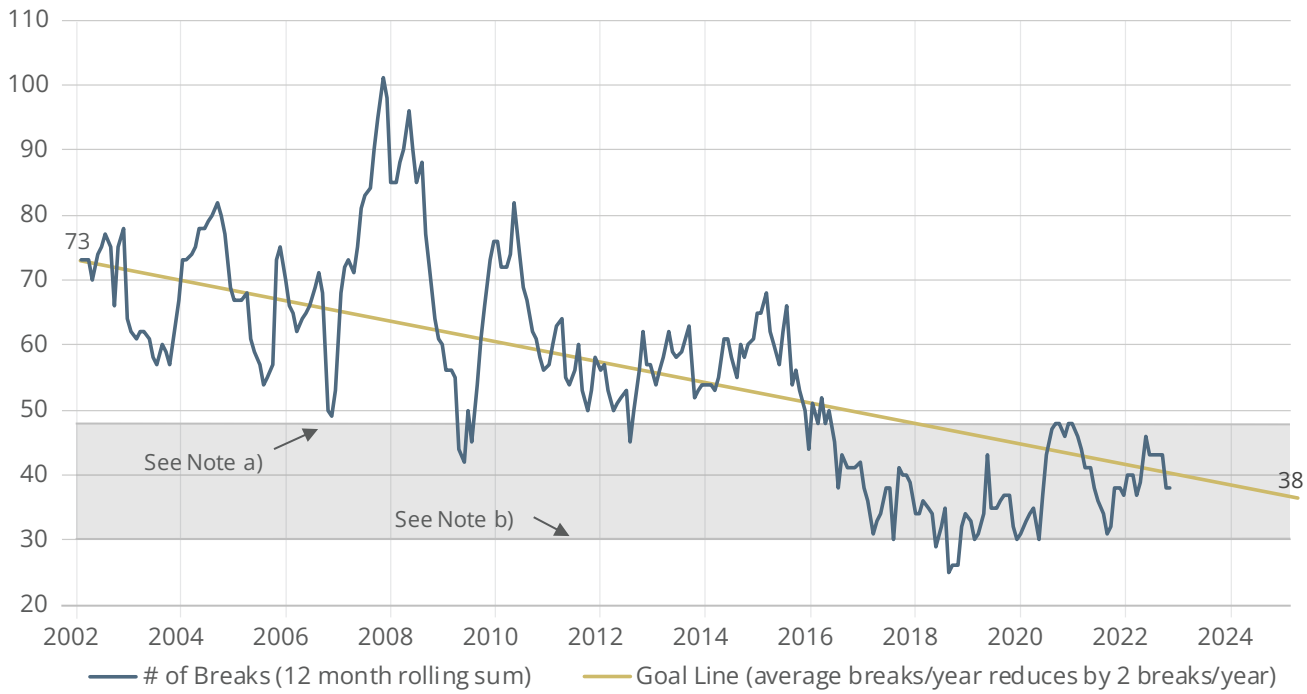


Figure 47. Mainline Break Trend (20 Years)



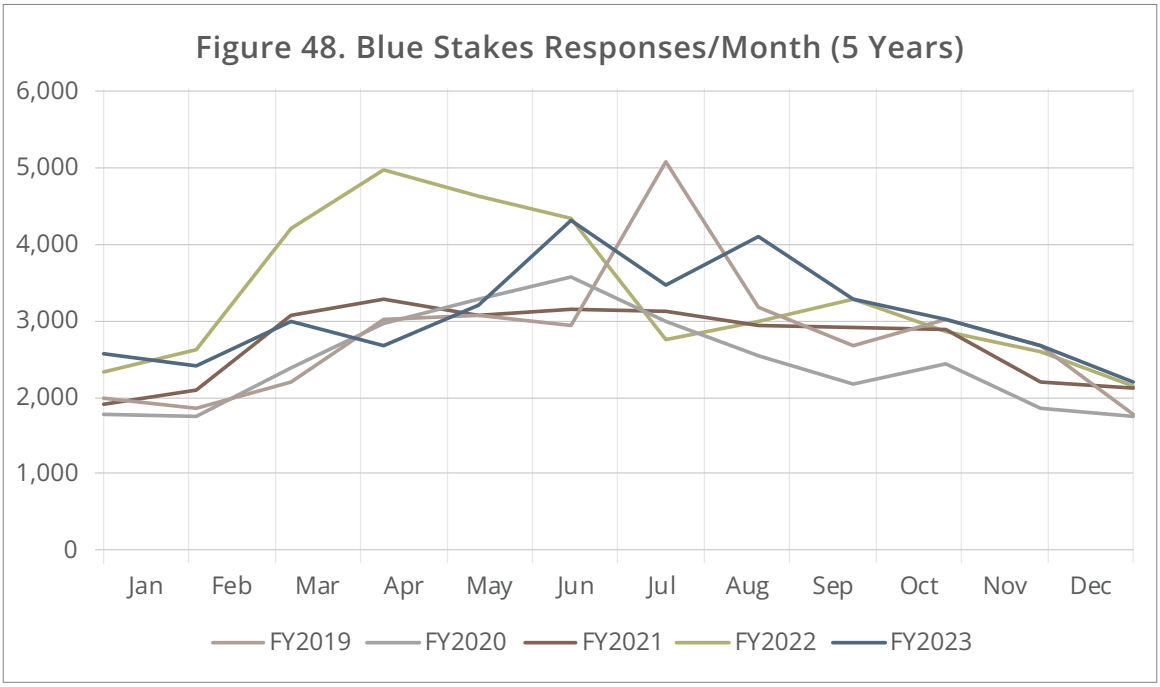
Notes:

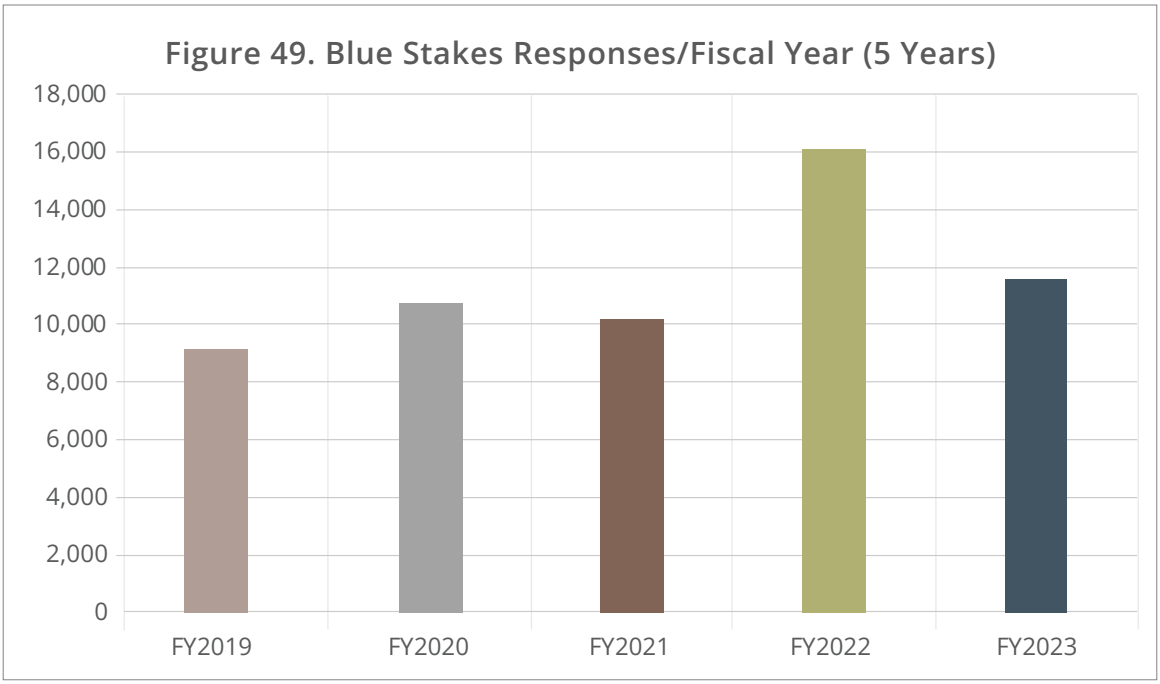
a) US and Canada average break rate applied to District's system = 47 breaks per year [Comprehensive Main Break Rate Study, Folkman, 2018].

b) AWWA 2019 Benchmarking Report National median break rate applied to District's system = 30 breaks per year.

Inspections and Retail Connections

The District's Pipeline Maintenance Division is responsible for responding to Blue Stakes Requests throughout our service area. Blue Stakes of Utah 811 is the non-profit membership association formed by Utah's facility owners, including JVWCD, to protect underground facilities and minimize service interruptions. Figure 48 shows a five-year comparison of the number of Blue Stakes Requests per month. Figure 49 compares the total number of responses to Blue Stakes requests over the past five fiscal years.





Pipeline/Valve Summary

Jordan Valley Water maintains about 1.8 M linear feet of pipe (nearly 350 miles), varying in diameter from less than two-inch, up to 90-inch.

Figure 50. Pipeline and Valve Summary

Pipe Diameter (in.)	Pipe Length (LF)	Miles of Pipe	Number of Valves	Percent of System
< 2	12,894.68	2.44	18	0.69%
2	4,122.91	0.78	71	0.22%
3-4	18,408.29	3.49	552	0.99%
6	260,053.36	49.25	2241	14.01%
8	302,867.45	57.36	1145	16.32%
10	72,671.85	13.76	200	3.92%
12	92,388.02	17.50	361	4.98%
14	23,258.33	4.40	48	1.25%
15-16	143,901.99	27.25	135	7.75%
18	113,348.82	21.47	57	6.11%
20-21	64,906.56	12.29	48	3.50%
24	147,802.76	27.99	124	7.97%
27	20,021.43	3.79	1	1.08%
28	253.78	0.05	0	0.01%
30	92,029.70	17.43	76	4.96%
32	0.00	0.00	1	0.00%
33	79,758.87	15.11	5	4.30%
36	49,908.57	9.45	27	2.69%
42	22,203.46	4.21	20	1.20%
45	0.00	0.00	3	0.00%
48	88,727.43	16.80	36	4.78%
54	294.10	0.06	0	0.02%
60	14,924.21	2.83	5	0.80%
66	63,591.24	12.04	12	3.43%
69	828.56	0.16	0	0.04%
72	83,327.47	15.78	6	4.49%
78	80,042.24	15.16	9	4.31%
84	403.97	0.08	1	0.02%
90	2,704.40	0.51	3	0.15%
Total	**1,855,644.43**	**351.45**	**5205**	**100.00%**
Total Fire Hydrants	**1440**			

Retail System Connections

JVWCD delivers water to approximately 9,000 connections throughout its retail area. Figure 51 shows how many services were added in fiscal year 2023 and Figure 52 compares total connections across the past five fiscal years.

Figure 51. New Service Connections

	3/4"	1"	1.5"	2"	3"	6"	Total
July	-	-	-	-	-	-	**0**
August	9	-	1	-	1	-	**11**
September	1	-	-	-	1	-	**2**
October	1	-	-	1	1	1	**4**
November	-	2	-	-	-	-	**2**
December	-	-	-	-	-	-	**0**
January	-	5	-	-	-	-	**5**
February	-	-	-	-	2	-	**2**
March	-	-	-	-	-	-	**0**
April	-	-	-	-	-	-	**0**
May	-	1	-	1	3	-	**5**
June	-	-	-	-	2	1	**3**
Total	**11**	**8**	**1**	**2**	**10**	**2**	**34**

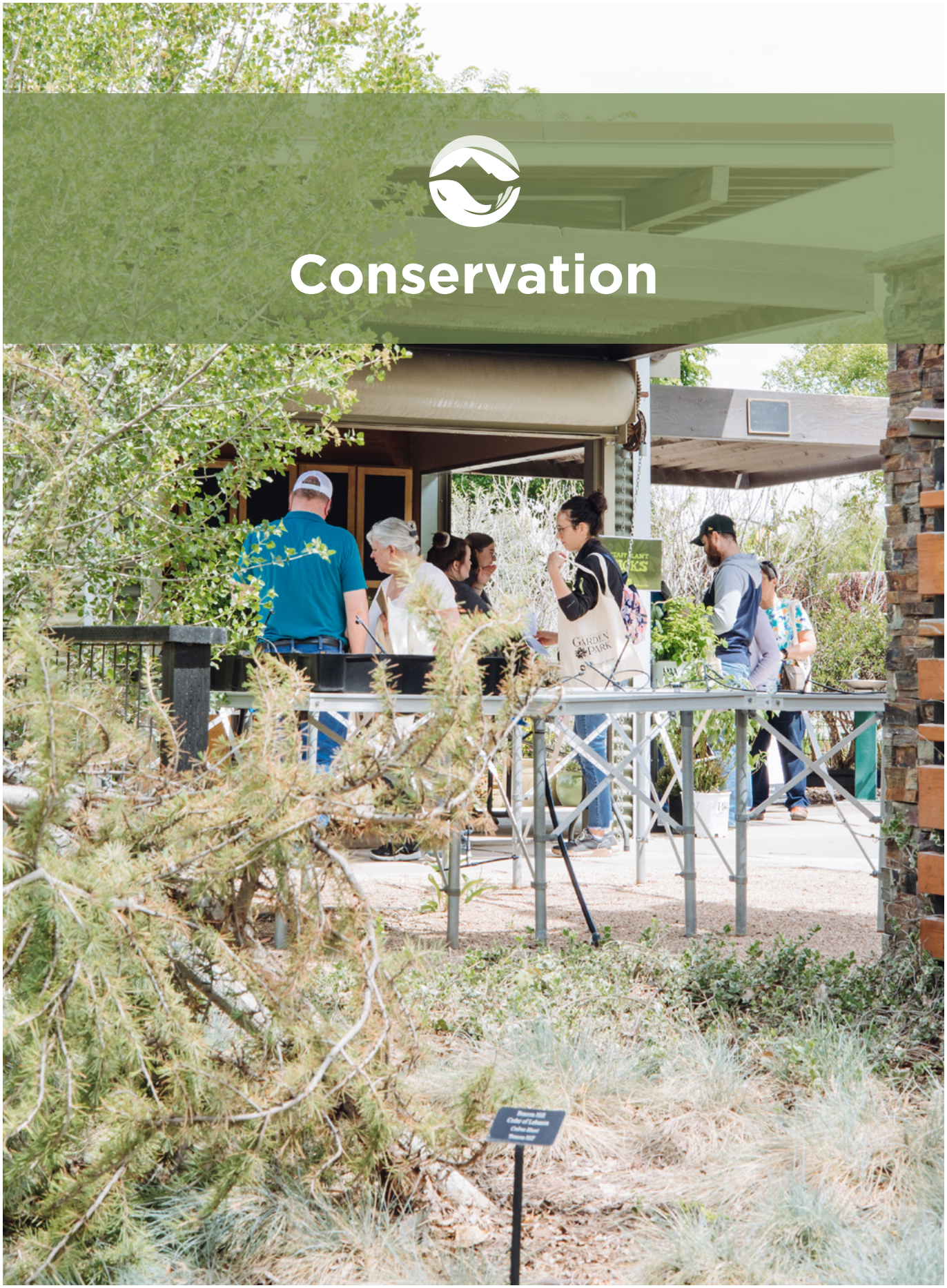
Figure 52. Retail Connections (5 Years)

	FY2023	FY2022	FY2021	FY2020	FY2019
Residential (single-family, duplexes, and HOAs)	7,180	7,172	7,121	7,069	7,434
Residential (apartments)	247	243	241	238	268
Commercial, industrial, institutional	1,152	1,146	1,135	1,136	1,220
Fire lines	303	294	290	293	306
Total Connections	**8,882**	**8,855**	**8,787**	**8,736**	**9,228**
Year over year difference	**27**	**68**	**51**	**(492)[1]**	**-**

1. Retail accounts decreased because Midvale City annexed a portion of our service area and took over these accounts


FREE MONE
WATER CONSERVATION
REBATES & INCENT
Utah Water Savers
It Pays To Save
UtahWaterSavers.com

Conservation



Conservation Garden Park

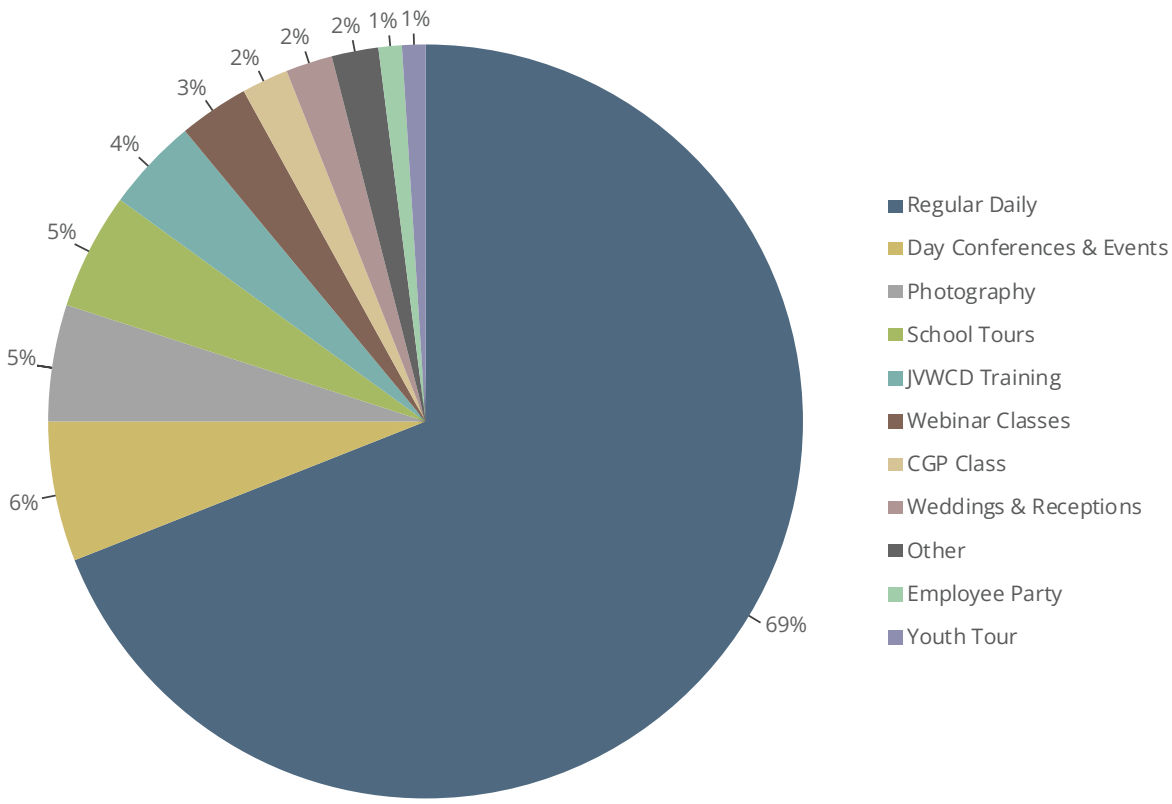
Conservation Garden Park is JVWCD's premier demonstration garden. In addition to assisting visitors at the park, conservation staff teach landscape classes in person and on demand. Figure 53 shows the total garden attendance and lists the number of classes and attendees over the past 5 years. Figure 54 shows a breakdown of garden visitors for FY2023 by category type.

Figure 53. Garden Attendance (5 Years)

Year	Total Attendance	# of Classes	Class Attendance
FY2023	38,299	44	2,369
FY2022	27,297[1]	31	2,136
FY2021	22,137[2]	22[3]	2,235
FY2020	38,665	47	2,311
FY2019	36,594	46	2,168

1. Restrictions relating to the COVID-19 pandemic began to ease in 2021, but still impacted overall Garden attendance.
2. Heavily impacted by the COVID-19 pandemic.
3. Switched to online classes in March 2020 because of COVID-19 restrictions. Many other demonstration classes and tours were canceled.

Figure 54. Garden Visitor Categories



Conservation Incentive Programs

Jordan Valley Water Conservancy District runs conservation programs throughout its retail area, and also helps facilitate statewide programs such as toilet and smart controller rebates. Figures 55-58 detail these programs. The Member Agency Grant Program (Figure 59) is available to our member agencies to help offset costs associated with conservation efforts.

Figure 55. Statewide Rebate Programs

JVWCD Service area only	Toilet	Smart Controller
# of Rebates Issued	157	800
Average rebate amount	$128.43	$74.08
Total rebates distributed	**$20,163.50**	**$59,190.86**

Figure 56. Localscapes Rewards Totals (2 Years)

	FY2023	FY2022
# of Rebates Issued	115	116
Project Area Sq Ft	637,937	562,608
Average Rebate Amount	$2,287.70	$1,913.97
Total Rebates Distributed	**$260,797.73**	**$222,020.54**

Figure 57. Flip Your Strip Totals (2 Years)

	FY2023	FY2022
# of Rebates Issued	228	165
Project Area Sq Ft	122,212	85,095
Average Rebate Amount	$664.77	$638.12
Total Rebates Distributed	**$151,566.50**	**$105,290.17**

Figure 58. Localscapes Partners (2 Years)

Partnership Category	FY2023	FY2022
Founding Partners[1]	4	4
Agency and Educational Partners[2]	13	7
Professional Partners[3]	107	85
Retail Partners[4]	27	25
Totals[5]	**151**	**92**

1. CUWCD, JVWCD, WBWCD, and WCWCD
2. Water providers and educational institutions committed to teaching and promoting Localscapes principles.
3. Trained landscape contractors/designers that take the Localscape Partner pledge.
4. Businesses that sell products enabling Localscapes, and, when discussing Localscapes, provide landscape solutions that align with the approach.
5. These numbers represent a running total and carry over from year to year.

Conservation Incentive Programs *(cont.)*

Figure 59. Member Agency Grant Program (17 Years)

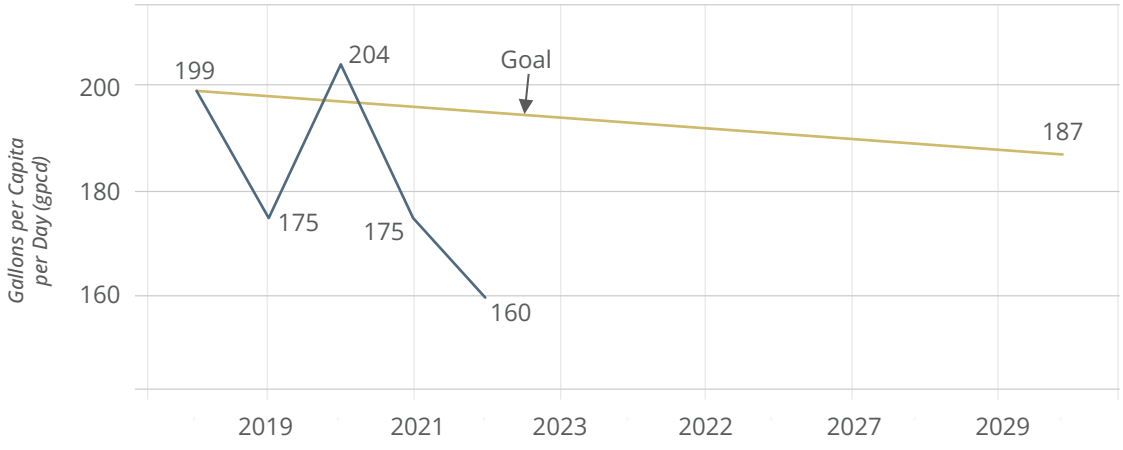
Member Agency	Public Education	Product Rebates	Landscape Improvements	Conserv. Website	Studies/ Reports	Secondary Metering	Scholarship	System Audit	Advanced Metering	Efficiency Standards[1]
Bluffdale	-	-	2006, 2022	-	2008	2018, 2020	-	-		2021
Draper City	-	-	2015, 2023	-	-	-	-	-	-	2023
Granger-Hunter Improvement District	2006, 2008, 2009, 2011, 2013, 2015, 2017, 2018, 2019, 2020, 2021, 2022, 2023	2009, 2011, 2017, 2018, 2019, 2020, 2021, 2022	2015, 2017, 2018, 2019, 2020	-	2006, 2020	-	2017, 2021[2], 2022 [2]	2017, 2018, 2019	2017, 2018, 2019	2023[3]
Herriman	-	-	2021, 2022 2023	-	-	2020	-	-	-	2020
Kearns Improvement District	2020, 2023	2006, 2008, 2009, 2011, 2013, 2015, 2017, 2018, 2019	2006, 2017, 2020, 2021, 2022	-	2017	-	2017	-	-	2022
Magna Water District	-	-	-	2006	-	2013	-	-	-	2023
Riverton	-	-	2020, 2022	-	-	-	-	-	-	2023
South Jordan	2006	2008, 2009, 2011, 2013, 2015, 2017, 2018, 2019, 2020, 2021, 2022, 2023	2006, 2009, 2015, 2017, 2018	2015	2006, 2011	-	2015, 2017	-	-	2021
South Salt Lake	-	-	2011, 2017	-	-	-	-	-	-	-
Taylorsville-Bennion Improvement District	-	-	2015, 2020, 2022	-	2015, 2022	-	-	-	-	2023[4]
WaterPro	-	-	-	-	-	2013, 2017, 2018, 2019, 2020, 2021, 2022	-	-	-	-
West Jordan	2006, 2006, 2009	2006	2008, 2009	-	2008, 2009, 2015, 2017, 2018	-	-	-	-	2021
White City Water Improvement District	-	-	-	-	-	-	-	-	-	2023

1. Replaced Soil Moisture Sensors with Water Efficiency Standards, since the former was only used once in 2006
2. Leak detection program similar to Water System Audit
3. Represents when West Valley City adopted Water Efficiency Standards
4. Represents when Taylorsville adopted Water Efficiency Standards

Water Conservation Goal

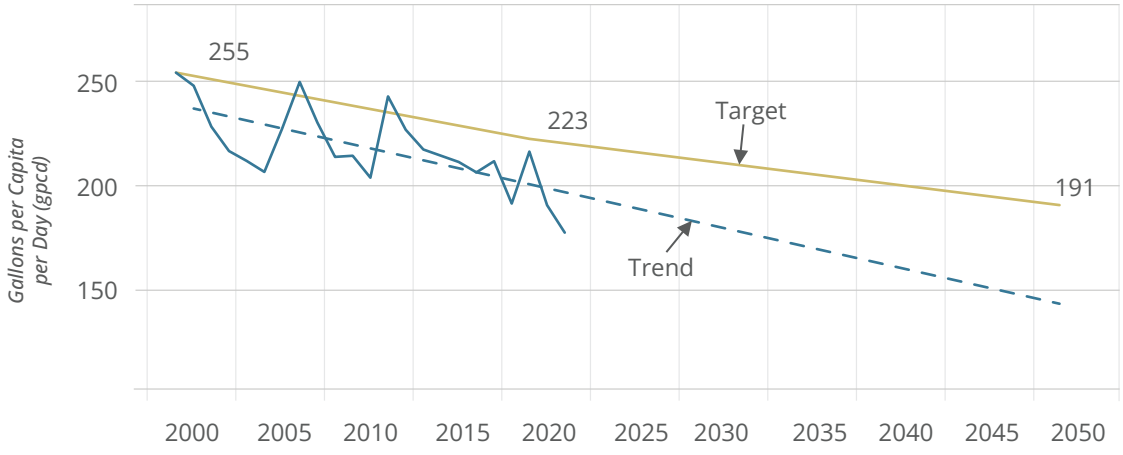
JVWCD's goal is to decrease gallons per capita per day (gpcd) water usage to 187 gpcd by 2030 based on Utah's 2019 "Regional M&I Water Conservation Goals" report. JVWCD tracks end usage per capita (water delivered divided by total population) to help track water conservation efforts. While weather conditions may cause fluctuations in water use from year to year, a decreasing trend may indicate conservation progress. Gross water usage per capita (all water supplies going into our system, divided by total population) is tracked to ensure we are compliant with our Utah Lake System agreement. Figures 60 and 61 show water use in comparison to the District's goal.

Figure 60. Annual End Usage per Capita (4 years)

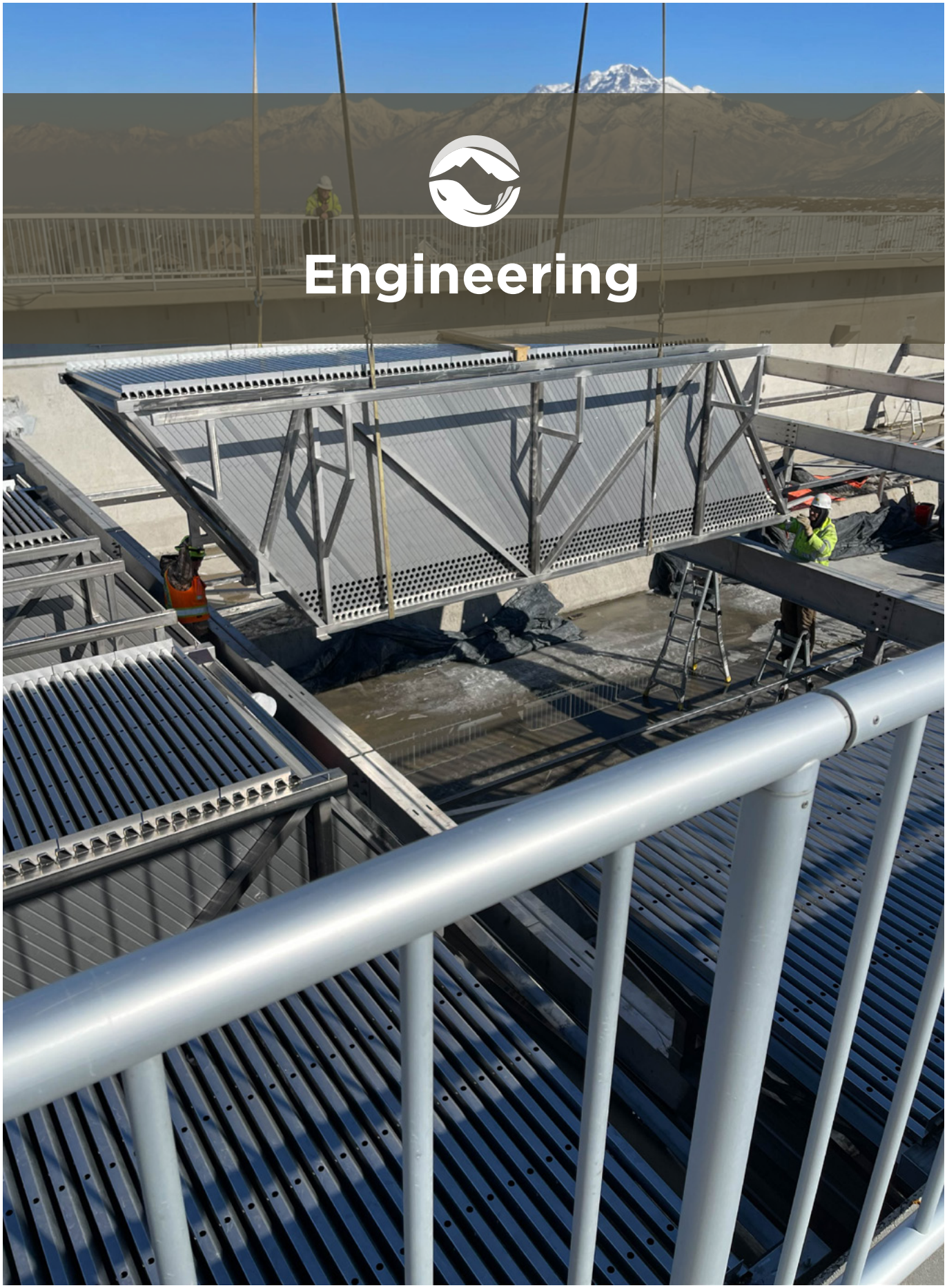


2030 End use goal is 187 gpcd by 2030

Figure 61. Annual Gross Usage per Capita (20 years)



ULS Project Target Line is 12.5% by 2020 and 25% by 2050
Trend line is tied to ULS Compliance



Engineering

Capital Projects

The Engineering Department completed 14 capital projects in the past fiscal year, with more than a dozen more ongoing. See the 2022 Annual Report for descriptions of the major capital improvements.

Figure 62. Projects Completed

Project	Engineering Cost	Construction Cost
11400 S. Redwood Road Meter Vault Rehabilitation	Staff Design	$92,038
4700 S. 5600 W. Vault Improvements	Staff Design	$95,242
Reservoir Chlorine Boosters	$218,400	$887,258
Jordan Aqueduct/Alpine Aqueduct Blowoff Drains	Staff Design	$132,270
JVWTP Landscaping Improvements	Staff Design	$185,807
SERWTP Fluoride Room Upgrades	Staff Design	$321,375
Deep Well #6 Well Improvements	$46,400	$350,979
JVWCD Headquarters Upper Campus Site and Improvements	$436,517	$1,241,664
JVWTP Plant Reclaim Water and Solids Handling Improvements	$575,355	$3,141,889
Four Well Rehabilitation[1]	$78,080	$1,334,407
8518 S. 960 E. Well Pump Replacement	$13,800	$124,226
2022 Vault Improvement Project	$339,747	$1,798,942
Five Concrete Reservoirs Repairs[2]	$255,340	$2,094,174
Point of the Mountain Actuator Replacements	Staff Design	$100,930

1. Wells: Newbury, 1000 E. 7800 S., 9800 S. 2300 E., 8200 S. 700 W.
2. Reservoirs: 6011 W. 4700 S., 5211 W. 6200 S., 9785 S. Eastdell Dr., 7986 W. 10200 S., and JVWTP Culinary Reservoir

Figure 63. Capital Projects Budget Status Report

	Total
Capital Projects Budget (Gross)	$54,294,522
Budgeted Reimbursements	($2,849,432)
Capital Projects Budget (Net)	$51,445,090
Capital Projects Gross Expenditures (Unaudited)	$43,482,569

Administration

Safety

JVWCD tracks the safety of each department using the Occupational Safety and Health Administration's (OSHA) definition of recordable injuries as well as vehicle crashes. Figures 64-70 summarize the District's injury and vehicle crash rates by department, type, and cost.

Figure 64. Safety Track Summaries

FY2023	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYT	Past Fiscal Year Totals			
														FY2022	FY2021	FY2020	FY2019
District-wide																	
OSHA Recordable Injuries	0	0	0	0	1	0	1	0	0	0	0	1	**3**	4	2	3	5
Vehicle Crashes	0	1	0	0	0	0	0	1	0	1	1	0	**4**	13	15	9	10
Days since last OSHA recordable injury: 16 (6/15/2023)						Best record for time without an OSHA Recordable Injury: 387 (7/6/2015 - 7/27/2016)											
Days since last vehicle crash: 46 (5/16/2023)						Best record for time without a vehicle crash: 179 (7/18/2013 - 1/13/2014)											
Maintenance Department																	
OSHA Recordable Injuries	0	0	0	0	1	0	0	0	0	0	0	0	**1**	3	0	2	2
Vehicle Crashes	0	0	0	0	0	0	0	1	0	0	1	0	**2**	10	11	6	7
Days since last OSHA recordable injury: 216 (11/27/2022)						Best record for time without an OSHA Recordable Injury: 721 (6/22/2015 - 6/12/2017)											
Days since last vehicle crash: 46 (5/16/2023)						Best record for time without a vehicle crash: 260 (5/19/2022 - 2/3/2023)											
Operations Department																	
OSHA Recordable Injuries	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	1	0	2
Vehicle Crashes	0	1	0	0	0	0	0	0	0	0	0	0	**1**	2	3	2	2
Days since last OSHA recordable injury: 629 (10/10/2021)						Best record for time without an OSHA Recordable Injury: 826 (3/22/2019 - 6/25/2021)											
Days since last vehicle crash: 326 (8/9/2022)						Best record for time without a vehicle crash: 454 (4/23/2015 - 7/20/2016)											
Administration, Communications, Engineering, and Information Systems																	
OSHA Recordable Injuries	0	0	0	0	0	0	1	0	0	0	0	1	**2**	0	1	1	1
Vehicle Crashes	0	0	0	0	0	0	0	0	0	1	0	0	**1**	1	1	1	1
Days since last OSHA recordable injury: 16 (6/15/2023)						Best record for time without an OSHA Recordable Injury: 1,555 (1/15/2014 - 4/19/2018)											
Days since last vehicle crash: 74 (4/18/2023)						Best record for time without a vehicle crash: 666 (5/9/2016 - 3/6/2018)											

Safety *(cont.)*

Figure 65. OSHA Recordable Injuries[1]

Date	Type of Injury	Light duty restriction (days)	Days away from work	Workers Comp Paid to Date[2]	Department
11/27/22	Arm bicep tendon tear	151	5	$22,608	Maintenance
1/18/23	Sprained left ankle	13	0	$562	Information Systems
6/15/23	Laceration, right arm	0	0	$0	Communications
Total	**3**	**164**	**5**	**$28,314**	

1. Any work-related death, or any injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid.
2. Costs are subject to change over time as files close that are open at year end.

Figure 66. OSHA Recordable Injury Incident Rates (5 Years)

Fiscal Year	Average Employee Hours Worked[1]	# of Injuries	Incident Rate[2]	Workers Comp Paid to Date
FY2023	314,083	3	1.9	$28,876
FY2022	328,640	4	2.4	$2,974
FY2021	324,480	2	1.2	$5,672
FY2020	322,400	3	1.9	$999
FY2019	322,400	5	3.1	$5,810

Performance Indicators

Less than 5.7 | 5.7 - 8.0 | Greater than 8.0

1. Number of employees x 2,000 (2000 hours is the average number of hours an employee works per year and is the number that OSHA recommends for calculating incident rates)
2. Total injuries x 200,000, divided by number of employee hours worked.

Figure 67. OSHA Recordable Injury Incident Rates by Dept. (5 Years)

Dept.	FY2023	FY2022	FY2021	FY2020	FY2019	5-yr Avg
Admin, etc	3.1	0.0	1.5	1.6	1.6	1.6
Maintenance	2.1	5.8	0.0	3.9	3.8	3.1
Operations	0.0	2.2	2.2	0.0	4.3	1.7

Performance Indicators

Less than 5.7 | 5.7 - 8.0 | Greater than 8.0

Safety *(cont.)*

Figure 68. Vehicle Crashes[1]

Date	Type	District Cost	Department
8/9/2022	Collision	$1,693	Operations
2/3/2023	Rear-end	$859	Maintenance
4/18/2023	Collision	$0	Communications
5/16/2023	Backing	$2,788	Maintenance
Total		**$5,341**	

1. Vehicle Crash: an incident where an employee is driving any type of vehicle which collides with anything that causes damage to the vehicle or the object hit; or that results in medical expenses or bodily injury for anyone involved.

Figure 69. Vehicle Crash Incident Rates (5 Years)

Fiscal Year	Miles Driven	# of Crashes	Incident Rate[1]	District Cost[2]
FY2023	582,784	4	0.7	$5,341
FY2022	565,450	13	2.3	$15,463
FY2021	639,491	15	2.3	$38,760
FY2020	542,740	9	1.7	$7,905
FY2019	555,974	10	1.8	$33,284

Performance Indicators

Less than 1.8 | 1.8-2.3 | Greater than 2.3

1. Total crashes x 100,000, divided by number of miles driven.
2. Total cost for all repairs for all parties involved. Subject to change if any cases are open.

Figure 70. Department Crash Rates (5 Years)

Dept.	FY2023	FY2022	FY2021	FY2020	FY2019	5-yr Avg
Admin, etc	0.9	1.3	1.3	1.5	1.7	1.3
Maintenance	0.6	2.5	3.7	2.0	2.2	2.2
Operations	1.2	0.6	1.7	1.1	1.2	1.2

Performance Indicators

Less than 1.8 | 1.8-2.3 | Greater than 2.3

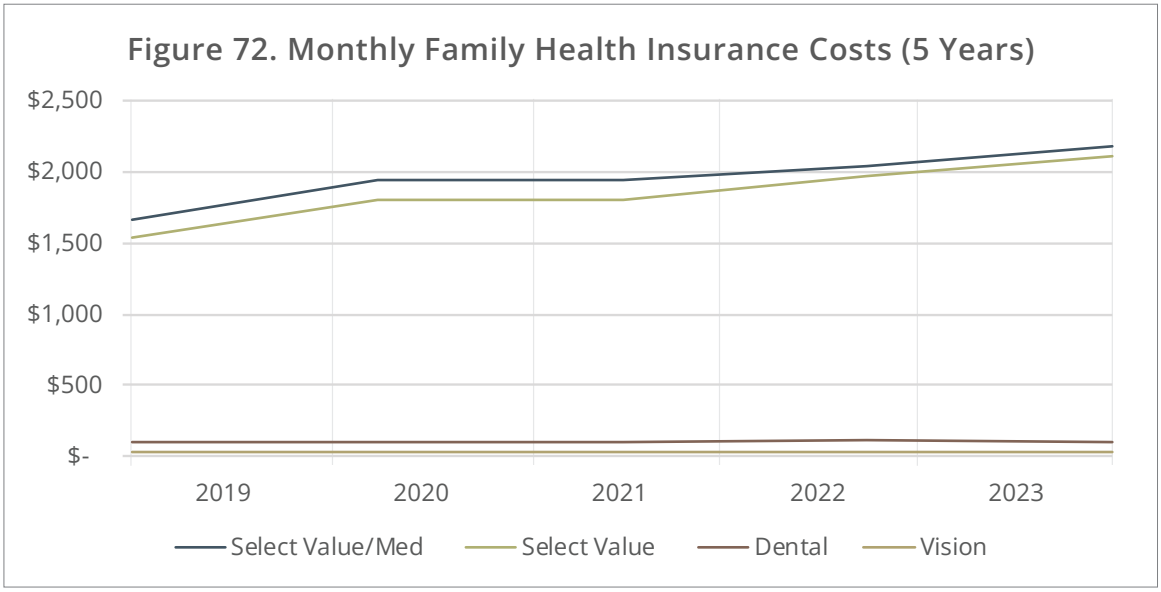
Human Resources

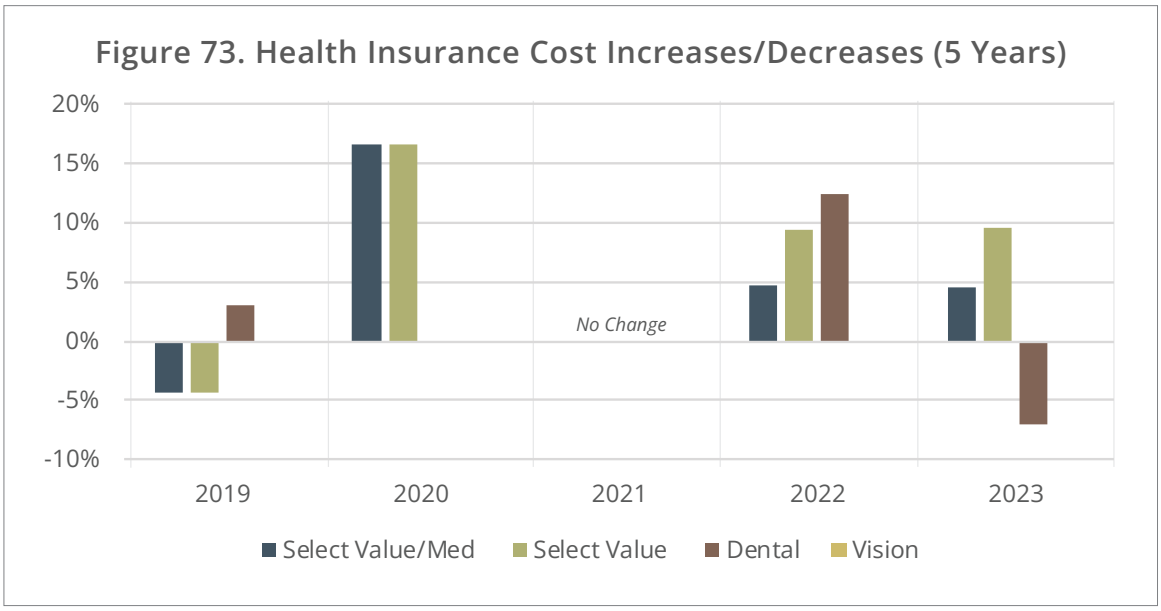
Figure 71. Personnel History (5 Years)

Calendar Year	2022	2021	2020	2019	2018
Full-time Authorized Positions	155	152	150	147	147
Part-time Positions	0	0	0	1	1
New Positions Authorized	3	2	0	0	1
Position Title	Right-of-Way Engineer Meter Section Supervisor Conservation Supervisor	Pipeline Maintenance System Administrator			System Operator
Turnover - # of Terminations	34	19	12	12	3
Retirements	9	4	3	10	6
Turnover Rate	21.9%	12.5%	8.0%	14.9 %	6.1%
Employees per 1,000 AF of Water Delivered[1]	1.18	1.21	1.01	1.08	1.03
AF delivered per employee	845	822	981	929	965

1. AF amount is based on calendar year. See annual report for details.

Human Resources *(cont.)*





Human Resources *(cont.)*

Figure 74. Personnel Costs (5 Years)

Calendar Year	2023	2022	2021	2020	2019
History of Salary Increases (July 1)					
Merit Increase	6.5%	8.5%[1]	3.5%	4.0%	3.2%
Merit/Step Average	7.1%	3.4% and 5.2%	4.75%	4.76%	4.45%
Merit Range	0 to 12.6%	2% to 24.53%[2]	1.75% to 13.33%	0% to 12.65%	0% to 9.14%
Health Insurance Plan and Costs					
Select Value/Med Tier[3]	Value/Med Tier	SelectMed+	SelectMed+	SelectMed+	SelectMed+
Single	$668.70	$689.80	$659.30	$659.30	$565.40
2-Party	$1,437.80	$1,483.30	$1,417.70	$1,417.70	$1,215.90
Family	$1,972.80	$2,034.90	$1,944.90	$1,944.90	$1,668.00
% Change from Previous	0%	4.7%	0.0%	16.6%	- 4.4%
Select Value					
Single	N/A	$668.70	$609.90	$609.90	$523.10
2-Party	N/A	$1,437.80	$1,311.40	$1,311.40	$1,124.70
Family	N/A	$1,972.80	$1,799.30	$1,799.30	$1,543.10
% Change from Previous	N/A	9.4%	0.0%	16.6%	- 4.4%
Dental Plan (Cigna)					
Single	$35.61	$33.28	$29.62	$29.62	$29.62
2-Party	$67.54	$63.12	$56.18	$56.18	$56.18
Family	$128.43	$120.03	$106.84	$106.84	$106.84
% Change from Previous	7%	11%	0.0%	0.0%	3.0%
Vision Plan (Self Insured)					
Single	$8.50	$8.50	$8.50	$8.50	$8.50
2-Party	$18.00	$18.00	$18.00	$18.00	$18.00
Family	$25.00	$25.00	$25.00	$25.00	$25.00
% Change from Previous	0%	0%	0%	0%	0%
Personnel Budget	FY2024	FY2023	FY2022	FY2021	FY2020
Salary and Benefits	$20,412,002	$19,446,391	$17,894,417	$17,192,556	$16,536,173
% Change from Previous	4.5%	8.7%	4.1%	4.0%	-0.3%

1. Includes 4% (steps) or 3% (above midpoint) in March 4.5% (steps) or 5.5% (above midpoint) in July.
2. Includes 2% to 4% in March 0% to 24.53% in July
3. Our previous two medical networks (Value & Med+) were combined into one called Value/Med Tier Network in 2023.

Financials

Figure 75 compares the budgets from fiscal year 2023 to the upcoming fiscal year 2024 budget. Figure 76 compares the actual sources and uses of funds for the five previous fiscal years.

Figure 75. Budget Overview (2 Years)

	FY2023 Budget	FY2024 Budget	Budget to Budget	
			Variance $	Variance %
Sources of Funds				
Water Sales - Wholesale	$52,554,723	$54,767,689	$2,212,966	4.2%
Water Sales - Retail	6,758,349	7,212,387	454,038	6.7%
Property Tax Revenue	25,650,346	28,731,637	3,081,291	12.0%
Investment Income	1,087,300	3,943,800	2,856,500	262.7%
Connection Fees	512,000	435,000	(77,000)	-15.0%
Other	2,243,093	3,575,000	1,331,907	59.4%
Subtotal	*88,805,811*	*98,665,513*	*9,859,702*	*11.1%*
Revenue Stabilization Fund	8,402,108	5,663,452	(2,738,656)	-32.6%
Capital Projects Fund (net)	51,445,090	61,216,008	9,770,918	19.0%
Capital Projects Fund (Reimbursement)	2,849,431	11,889,642	9,040,211	317.3%
JVCGF Contributions	-	-	-	N/A
Total Sources	**$151,502,440**	**$177,434,615**	**$25,932,175**	**17.1%**
Uses of Funds				
Water Purchases	$18,615,784	$19,449,887	$834,103	4.5%
Operation and Maintenance Expenses	11,621,168	12,255,706	634,538	5.5%
General and Administrative Expenses	5,728,341	7,552,953	1,824,612	31.9%
Personnel Expenses	19,587,691	20,467,172	879,481	4.5%
Subtotal	*55,552,984*	*59,725,718*	*4,172,734*	*7.5%*
Capital Projects (Gross)	54,294,521	73,105,650	18,811,129	34.6%
JVCGF Contribution Projects	-	-	-	N/A
Total Operating and Capital Uses	**$109,847,505**	**$132,831,368**	**$22,983,863**	**20.9%**
Net Operating Revenues	$41,654,935	$44,603,247	$2,948,312	7.1%
Debt Service Payments	(23,164,500)	(25,405,675)	(2,241,175)	9.7%
Debt Service Coverage Ratio	1.80	1.76		
Amount Available to Transfer to Reserves:				
Total from Operations	**$18,490,435**	**$19,197,572**	**$707,137**	**3.8%**

Financials *(cont.)*

Figure 76. Completed Fiscal Years Financial Results (5 Years)

	FY2022 Actual[1]	FY2021 Actual	FY2020 Actual	FY2019 Actual	FY2018 Actual
Sources of Funds					
Water Sales - Wholesale	$48,200,098	$53,008,777	$51,305,372	$44,116,589	$44,669,433
Water Sales - Retail	6,052,698	7,548,576	7,115,527	7,148,704	7,124,267
Property Tax Revenue	24,204,336	21,133,800	20,281,934	20,063,290	18,203,887
Investment Income	584,237	638,942	1,900,885	2,260,091	1,651,609
Connection Fees	336,820	567,778	474,389	494,319	302,368
Other	1,587,432	2,530,587	1,871,210	1,568,813	1,404,560
Subtotal	*80,965,621*	*85,428,460*	*82,949,317*	*75,651,806*	*73,356,124*
Revenue Stabilization Fund	5,590,263	4,699,127	1,345,760	-	-
Capital Projects Fund (net)	13,970,831	12,895,911	31,028,162	42,393,937	36,425,048
Capital Projects Fund (Reimbursement)	971,104	577,537	1,235,989	289,903	1,338,915
JVCGF Contributions	-	46,976	140,100	350,000	22,678
Total Sources	**$101,497,819**	**$103,648,011**	**$116,699,328**	**$118,685,646**	**$111,142,765**
Uses of Funds					
Operation and Maintenance	$47,992,982	$46,870,156	$44,001,460	$41,143,238	$40,029,461
Bond Principal and Interest	21,891,591	22,040,296	22,003,217	20,365,220	20,437,815
Transfers to Reserve Funds:					
Replacement Reserve Fund	10,898,744	11,460,061	6,060,262	5,458,272	4,556,508
Development Fee Fund	336,820	567,778	474,389	494,319	302,368
General Equipment Fund	700,000	700,000	679,400	800,000	700,000
Emergency Reserve Fund	200,000	200,000	300,000	300,000	300,000
Interest Allocated to Funds	387,169	434,238	1,249,681	1,310,849	1,078,116
Revenue Stabilization Fund	3,648,578	7,655,058	9,126,668	5,079,908	5,451,856
Revenue Fund	300,000	-	100,000	200,000	-
Operation and Maint. Fund	200,000	200,000	300,000	500,000	500,000
Total Transfers	16,671,311	21,217,135	18,290,400	14,143,348	12,888,848
Subtotal	*86,555,884*	*90,127,587*	*84,295,077*	*75,651,806*	*73,356,124*
Capital Projects (Gross)	14,941,935	13,473,448	32,264,151	42,683,840	37,763,963
JVCGF Contribution Projects	-	46,976	140,100	350,000	22,678
Total Uses	**$101,497,819**	**$103,648,011**	**$116,699,328**	**$118,685,646**	**$111,142,765**

1. Note: final results for fiscal year FY2023 are not yet available. FY2022 is the most recent year.

JORDAN VALLEY WATER

CONSERVANCY DISTRICT

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CONSERVANCY DISTRICT

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