

2018/2019

SUMMARY OF OPERATIONS



JORDAN VALLEY WATER
CONSERVANCY DISTRICT

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Whenever possible, data for the fiscal year were used in this report. In cases where fiscal year data was not available or feasible to use, we have listed data from the calendar year.

DEFINITIONS

DEFINITIONS FOR THIS PUBLICATION

AF = Acre feet	mg/L = Milligrams per liter
ASR = Aquifer storage & recovery (treated surface water pumped into the underground aquifer, then retrieved for use at a later date)	MSL = Mean sea level
CFS = Cubic feet per second	MWDSLS = Metropolitan Water District of Salt Lake & Sandy
cfu/ml = Colony-forming units (bacteria) per milliliter	NTU = Nephelometric turbidity units
CT = Concentration x time (for chlorination)	OM&R = Operations, Maintenance & Replacement
Feet Above/Below Compromise = Utah Lake level above or below "Compromise Elevation," established by a 1986 agreement between landowners surrounding Utah Lake and water right owners. When the Utah Lake level exceeds Compromise Elevation, the radial gates at the Utah Lake Outlet Structures must be fully opened.	PEA = Poly-electrolyte Anionic (anionic polymer)
FTE = Full-time employee(s)	PEC = Poly-electrolyte Cationic (cationic polymer)
FY/FYE/FYT/FYTD = Fiscal Year/Fiscal Year Ending/Fiscal Year Total/Fiscal Year To Date	PAC = Powdered Activated Carbon
GWR = Groundwater Rule	PRWUA = Provo River Water Users Association
HAA = Haloacetic acid	SCADA = Supervisory Control and Data Acquisition (a computer-based system for remotely monitoring and controlling water systems)
HPC = Heterotrophic plate count	SERWTP = Southeast Regional Water Treatment Plant
JVWCD = Jordan Valley Water Conservancy District	SWGWTP = Southwest Groundwater Treatment Plant
JVWTP = Jordan Valley Water Treatment Plant	SWJVGWP = Southwest Jordan Valley Groundwater Project
M&I = Municipal and Industrial	TDS = Total dissolved solids
MG = Million gallons	THM = Trihalomethane
MGD = Million gallons per day	TOC = Total organic carbon
	UFRV = Unit filter run volume

SUPPLIES

Municipal & Industrial water supplies (acre-feet)	FY 18/19	FY 17/18	FY 16/17	FY 15/16
Jordanelle Reservoir (Central Utah Project) ^a	37,930	45,707	32,306	42,684
Central Water Project (CWP)	10,000	8,000	6,000	4,000
Deer Creek Reservoir (Provo River Project) ^b				
storage	8,149	9,986	8,947	10,581
extra allotment	3,872	277	12,601	0
leases & purchases	0	0	0	0
temporary Provo River storage	0	0	0	0
MWD surplus (Little Cottonwood Creek)	0	0	0	0
Upper Provo River reservoirs ^c	1,969	2,105	2,052	1,897
Echo Reservoir ^c	1,752	6,035	1,567	3,220
Provo River (direct flows) ^a	15,031	14,247	17,541	17,766
Weber River (direct flows) ^b	0	2,260	0	0
Local Wasatch streams	1,550	1,894	2,515	1,998
Bingham Canyon Water Treatment Plant	3,046	0	44	1,832
SWGTP Feedwater (wells)	5,551	3,244	5,770	4,712
SL Valley Groundwater (wells)	9,228	8715	14,254	7,015
SUBTOTAL FOR M&I	98,078	102,470	103,597	95,705

Irrigation water supplies

Jordanelle Reservoir (Central Utah Project) ^a	0	0	0	0
Deer Creek Reservoir (Provo River Project) ^b				
storage	0	0	0	0
extra allotment	0	0	341	0
leases & purchases	0	0	0	0
temporary Provo River storage	0	0	0	0
Upper Provo River reservoirs ^a	0	0	0	0
Echo Reservoir ^c	0	0	0	0
Provo River (direct flows) ^a	6,915	3,590	10,503	5,340
Weber River (direct flows) ^b	0	0	0	0
Utah Lake	17,858	25,589	16,676	23,454
SUBTOTAL FOR IRRIGATION	24,773	29,179	27,520	28,794
TOTAL ALL SUPPLIES	122,851	131,649	131,117	124,499
Metropolitan Water District of Salt Lake & Sandy	13,670	10,234	9,020	9,649
TOTAL ALL WATER	136,521	141,883	140,137	134,184

a- Provo River sources
 b- Weber, Duchesne and Provo River sources
 c- Weber River sources

OPERATIONS

DELIVERIES

<i>All deliveries in acre feet</i>	FY 18/19	FY 17/18	FY 16/17	FY 15/16
Bluffdale City	2,788	2,503	2,607	2,199
Copperton	21	5	2	0
Draper City	4,056	4,066	4,229	3,794
Granger-Hunter Improvement District	17,805	19,872	17,917	19,616
Herriman City	3,870	3,657	3,772	2,965
Hexcel Corporation	925	912	851	574
Kearns Improvement District	7,626	7,972	8,281	7,988
Magna Water Company	855	695	844	820
Midvale City	1,048	229	85	151
Riverton City	4,317	4,736	4,988	4,161
City of South Jordan	15,328	15,571	15,531	14,561
City of South Salt Lake	1,267	1,412	1,055	1,059
Taylorsville-Bennion Improvement District	4,500	4,749	4,765	4,617
Utah State Department of Corrections	598	558	525	589
WaterPro, Inc. (treated)	687	991	1,302	870
WaterPro, Inc. (raw)	0	0	85	422
West Jordan City	19,400	19,554	20,924	19,493
White City Water Improvement District	0	0	0	0
Willow Creek Country Club	312	330	376	305
TOTAL WHOLESALE	85,403	87,811	88,139	84,184
Jordan Valley WCD retail area	7,588	8,920	8,897	8,278
JWCD treatment plant use & loss ^a	3,624	2,904	1,802	2,006
JWCD non-revenue water ^b	1,464	2,825	4,759	1,237
SUBTOTAL FOR DELIVERIES, USE & LOSS	98,079	102,460	103,597	95,705

Irrigation & raw water delivered

Utah State Department of Public Safety	0	11	12	10
Welby Jacob Water Users Company	24,772	29,178	27,508	28,784
SUBTOTAL FOR IRRIGATION & RAW WATER	24,772	29,189	27,520	28,794
TOTAL DELIVERED WATER	122,851	131,649	131,117	124,499

M&I water treated or transported

Metropolitan Water District of Salt Lake & Sandy ^c	13,670	10,234	9,020	9,649
SUBTOTAL FOR TREATED OR TRANSPORTED WATER	13,670	10,234	9,020	9,649
TOTAL WATER DELIVERED, TREATED OR TRANSPORTED	136,521	141,883	140,137	134,184

a- Treatment plant losses calculated based on plant use and evaporation for both JWTP and SERWTP. Includes SWGWTP by-product flow.

b- Water use and loss from raw water and distribution systems (hydrant and main line flushing, main line breaks, leaks, reservoir cleaning and irrigation of landscaping at Jordan Valley sites).

AWWA's most recent standard (1996) lists <10% as "acceptable" for unaccounted-for water, a term no longer commonly used.

JWCD's non-revenue water and treatment plant use and loss as a percentage of total water delivered, treated or transported are recorded below:

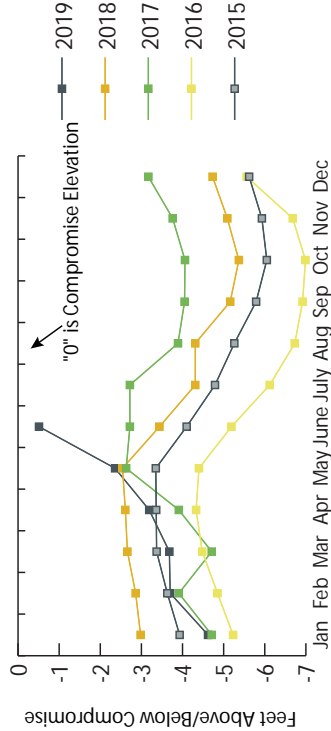
FY 18/19: 3.7%
 FY 17/18: 4.0%
 FY 16/17: 4.7%
 FY 15/16: 2.4%
 FY 14/15: 3.8%

Installation of more accurate meters will continue to show more accurate readings and data.

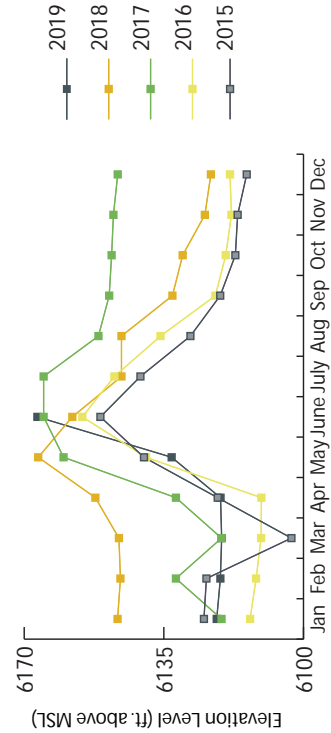
c- This total includes water exchanged on 15000 South for water delivered at 2100 South.

OPERATIONS

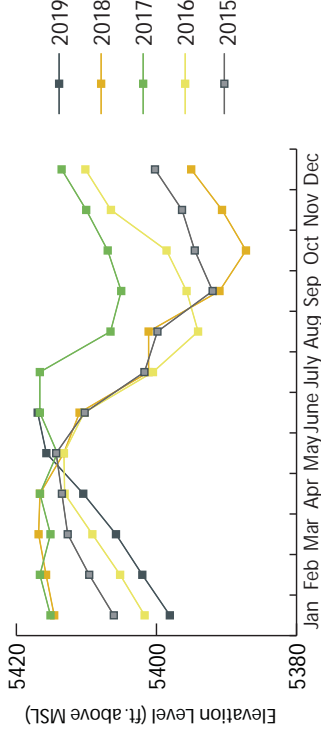
5-Year History of Utah Lake Levels



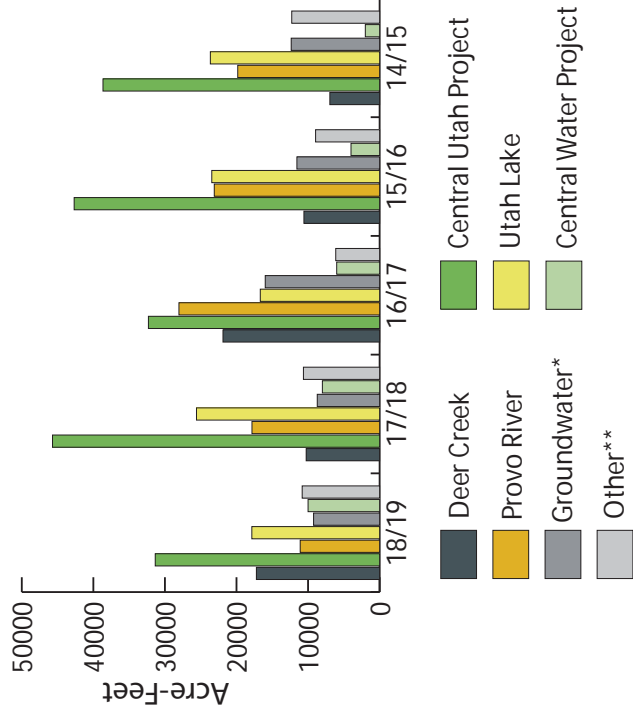
5-Year History of Jordanelle Reservoir Levels



5-Year History of Deer Creek Reservoir Levels

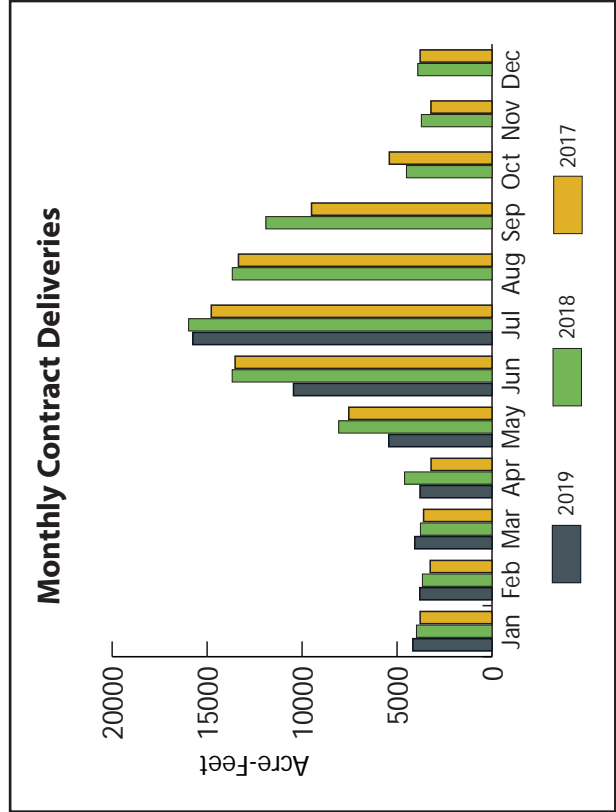
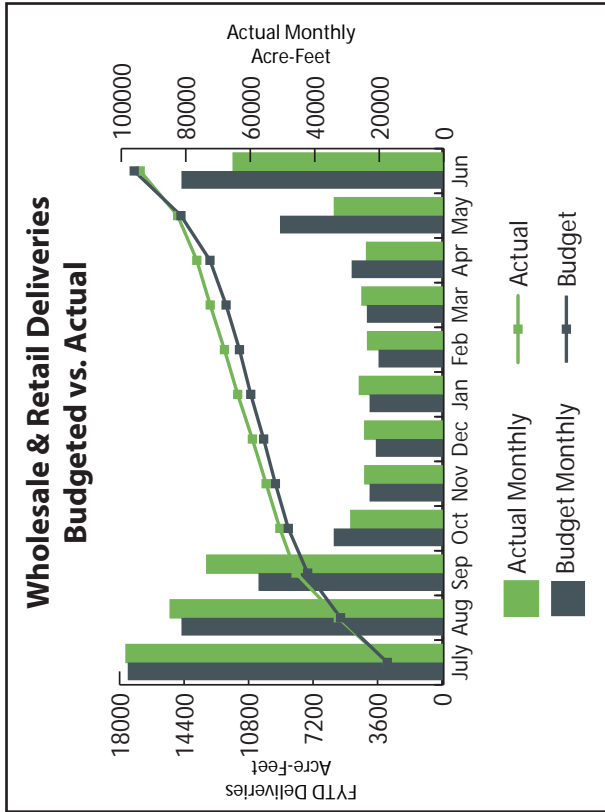
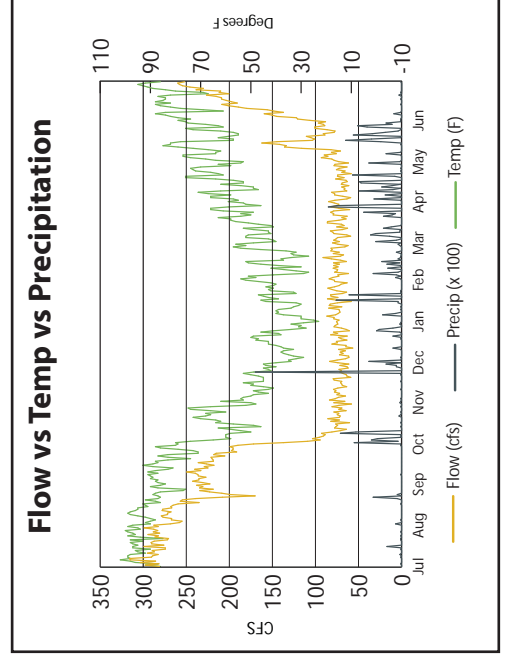
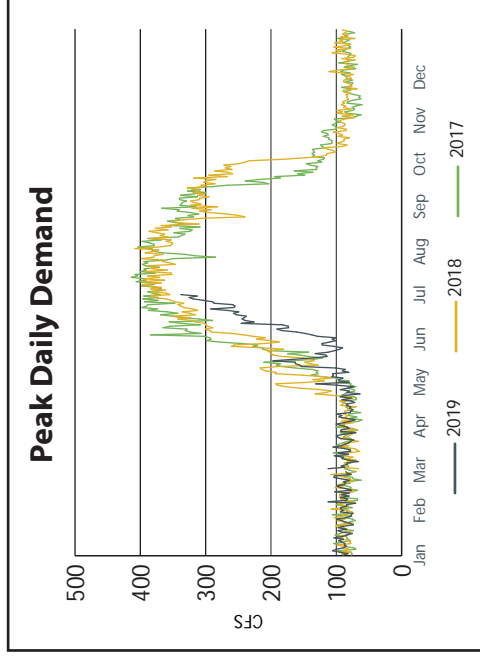
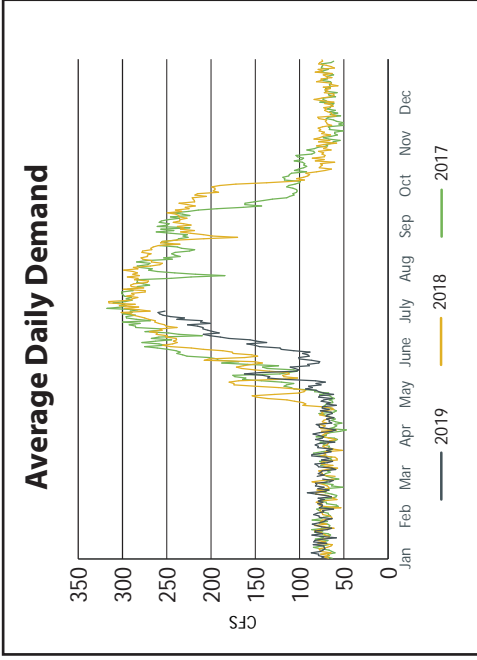


5-Year History of Water Source Supplies



**Junta lakes, Weber River, Echo Reservoir, Bingham Canyon Water Treatment Plant, and Wasatch mountain streams.

*Includes SWGWTP groundwater.



Contract deliveries are made to JWCD's 17 wholesale member agencies.

TREATMENT

General information
 Rated capacity (MGD)
 Capacity using standby power (MGD)
 Maximum daily effluent flow (MGD)
 Average daily flow during operation (MGD)
 Percent of fiscal year in operation

Plant production (acre-feet)
 Total flow into plant
 Plant use & loss
 Total treated water to distribution or injected

Direct Treatment O&M costs
 Personnel
 Chemicals
 Utilities
 Materials, Equipment, & Other
 Total treatment expenses

Treatment O&M cost per acre-foot delivered to distribution system.

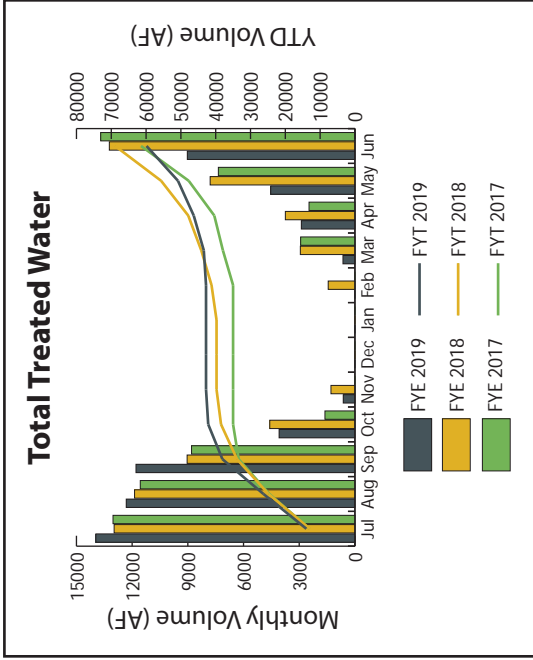
	JVWTP 18/19	SERWTP 18/19	SWGWTP 18/19	TOTALS 18/19
Rated capacity (MGD)	180	20	7	207
Capacity using standby power (MGD)	180	20	0	200
Maximum daily effluent flow (MGD)	169	16.4	5.4	191
Average daily flow during operation (MGD)	83	9.6	3.7	96
Percent of fiscal year in operation	65%	74%	78%	
<u>Plant production (acre-feet)</u>				
Total flow into plant	62,110	9,219	6,494	77,823
Plant use & loss	(1,075)	(180)	(2,369)	(3,624)
Total treated water to distribution or injected	61,035	9,039	4,125	74,199
<u>Direct Treatment O&M costs</u>				
Personnel	\$1,948,187	\$710,555	\$345,066	\$3,003,808
Chemicals	\$1,141,608	\$277,126	\$163,021	\$1,581,755
Utilities	\$248,131	\$87,056	\$449,661	\$784,848
Materials, Equipment, & Other	\$420,827	\$70,408	\$124,061	\$615,296
Total treatment expenses	\$3,758,753	\$1,145,145	\$1,081,809	\$5,985,707
Treatment O&M cost per acre-foot delivered to distribution system.	\$62	\$127	\$262	\$81

OPERATIONS

Jordan Valley Water Treatment Plant

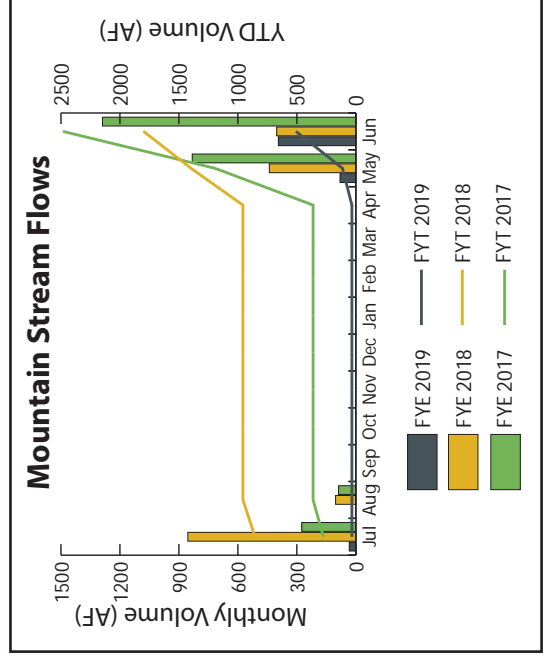
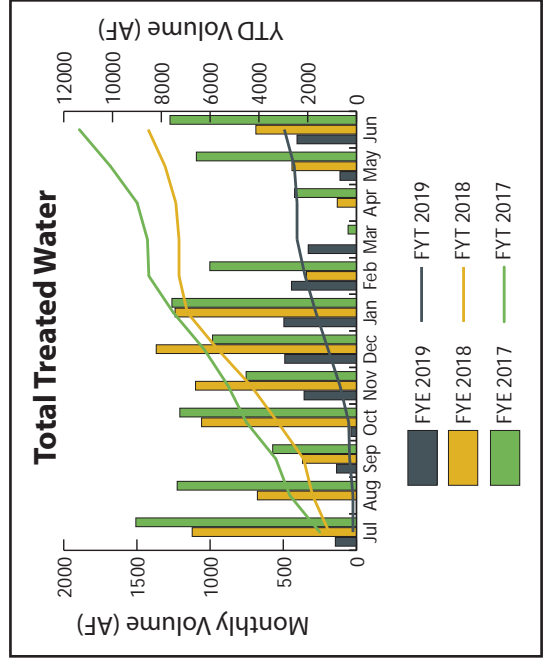
JVWTP is a conventional-process treatment plant with a rated capacity of 180 million gallons per day (MGD). Source water for the treatment plant is conveyed from the Provo River at the Olmsted Diversion, through the Jordan Aqueduct. Provo River water may also be diverted at the Murdock Diversion near the entrance of Provo Canyon, and conveyed through the Provo River Aqueduct. JVWTP is operated by Jordan Valley Water on behalf of itself and Metropolitan Water District of Salt Lake & Sandy. The plant is owned 2/7 by MWDSL and 5/7 by JWVCD.

Gaps in graph data for both JVWTP and SERWTP indicate the plant was off-line.



Southeast Regional Water Treatment Plant

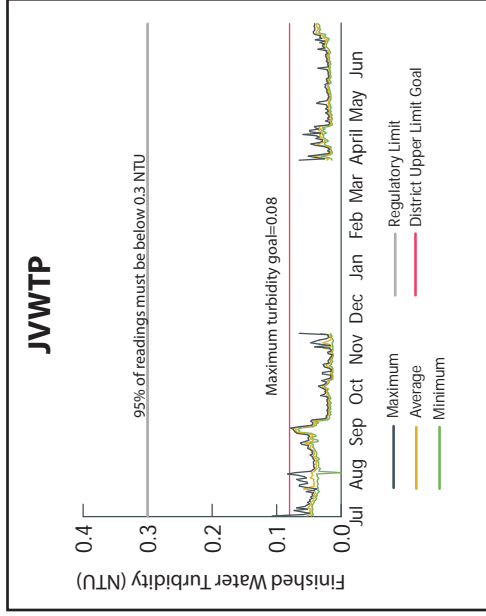
With a rated capacity of 20 MGD, SERWTP uses a unique process of high rate clarification to quickly settle suspended solids. The source water for the treatment plant is obtained from multiple sources. A portion of the water is conveyed through the Salt Lake Aqueduct, with the intake located at the base of Deer Creek Dam. The remaining portion of source water comes from snow pack runoff collected into the Draper Diversion from five mountain streams: South Fork, Middle Fork, Bells Canyon, Rocky Mouth, and Big Willow.



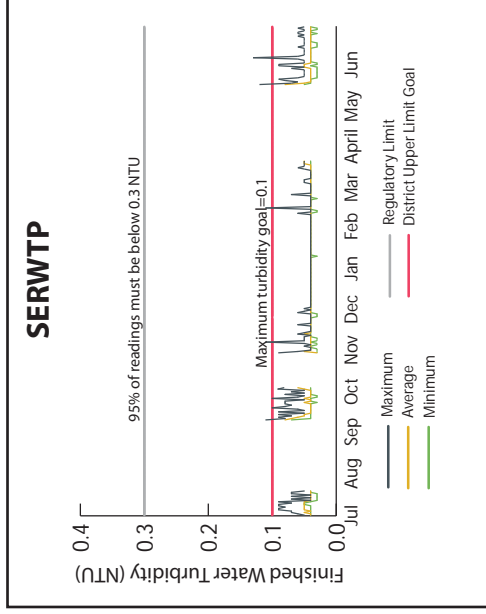
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Turbidity

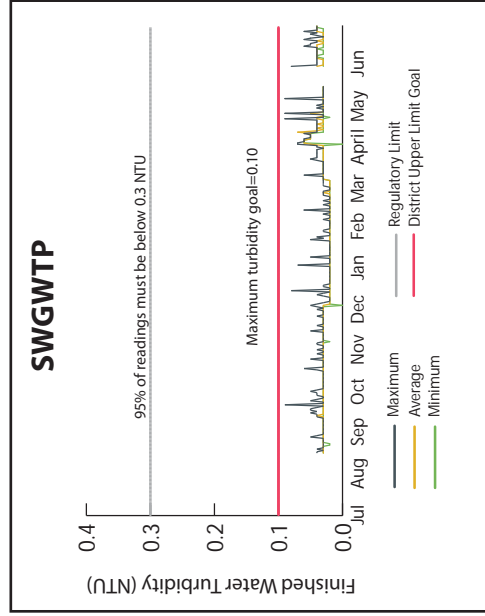
WATER QUALITY



JWWTTP
 Avg finished water turbidity for the year: 0.035 NTU
 Maximum finished water turbidity: 0.107 NTU
 Daily Goal < 0.08 NTU achieved for the year: 99%
 Record for consecutive days in operation under 0.10 NTU: 833
 Current days of operation below 0.10 NTU: 238



SERWTTP
 Avg finished water turbidity for the year: 0.041 NTU
 Maximum finished water turbidity: 0.127 NTU
 Daily Goal < .10 NTU achieved for the year: 98.3%
 Record for consecutive days in operation under 0.08 NTU: 732
 Days Plant in Operation: 231
 Current days of operation below 0.10 NTU: 227



SWGWTP
 Avg finished water turbidity for the year: 0.03 NTU
 Maximum finished water turbidity: 0.09 NTU
 Daily Goal < 0.04 NTU achieved for the year: 100%
 Record for consecutive days in operation under 0.10 NTU: 201
 Current days of operation below 0.10 NTU: 292

Current regulations for surface water require combined effluent turbidity to be below 0.3 NTU 95 percent of the time, and to 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. Jordan Valley Water has adopted even more stringent goals.

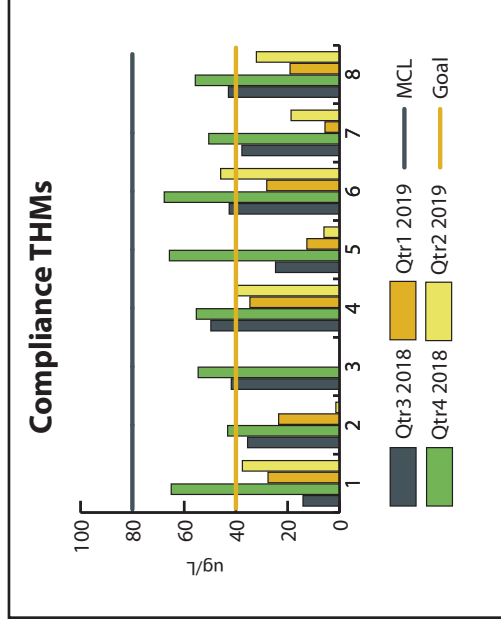
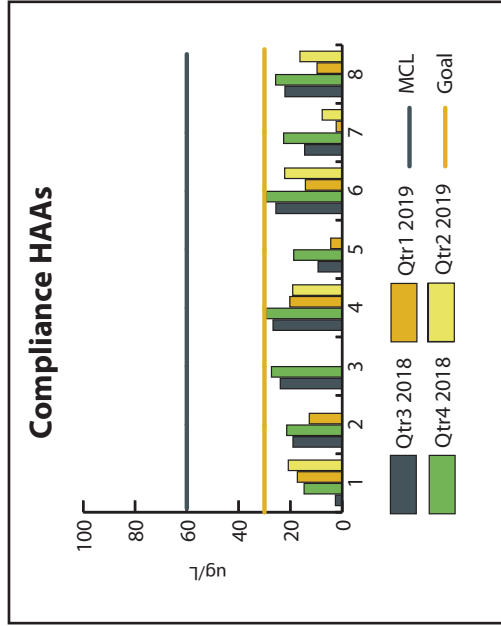
OPERATIONS

Disinfection By-Products (DBPs)

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.

TESTING LOCATIONS:

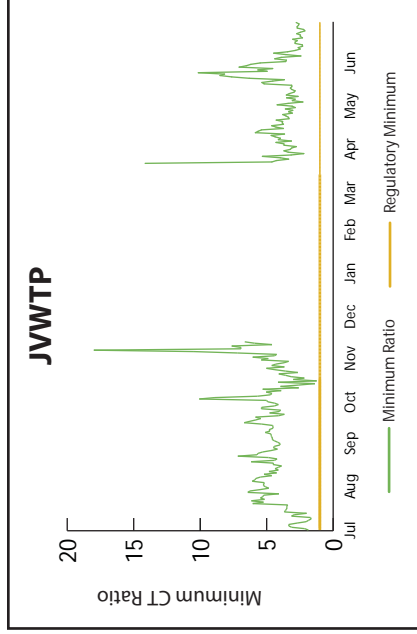
- 1- 13800 S. Pony Express Rd.
- 2- 700W. 11400 South
- 3- 10730 S. 1300 East
- 4- 3700W. 2100 South
- 5- 3610 S. 1000 West
- 6- 6000W. 4700 South
- 7- 5700W. 10200 South
- 8- 13953 S. Lookout Peak Dr.



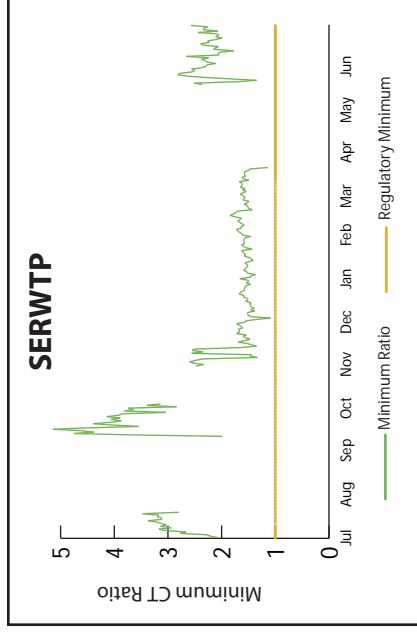
Chlorine Disinfection

Concentration x time (CT) is a measure of disinfection effectiveness which varies with water temperature, pH and disinfectant. Current regulations require sufficient CT to achieve 99.9 percent inactivation of Giardia and 99.99 percent inactivation of viruses. Compliance is determined by a CT ratio which compares the amount of CT achieved to the amount required. A minimum CT ratio of 1.0 and a chlorine residual of 0.2 mg/L is required.

Minimum CT Ratio



Average CT ratio for the year: 4.46
 Minimum CT ratio for the year: 1.24



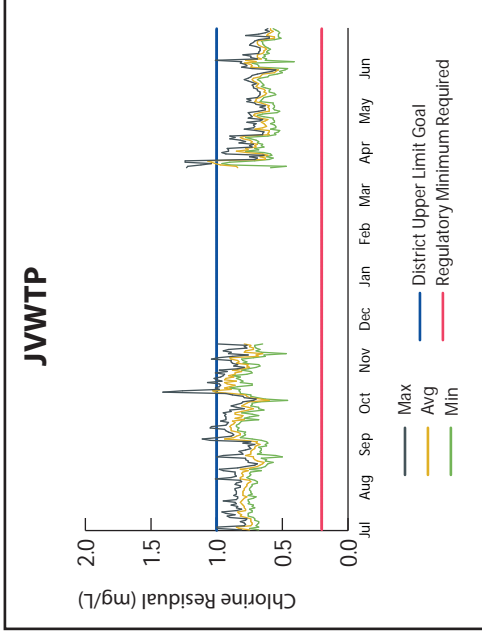
Average CT ratio for the year: 2.08
 Minimum CT ratio for the year: 1.09

Total Coliform Rule & Chlorine Residuals

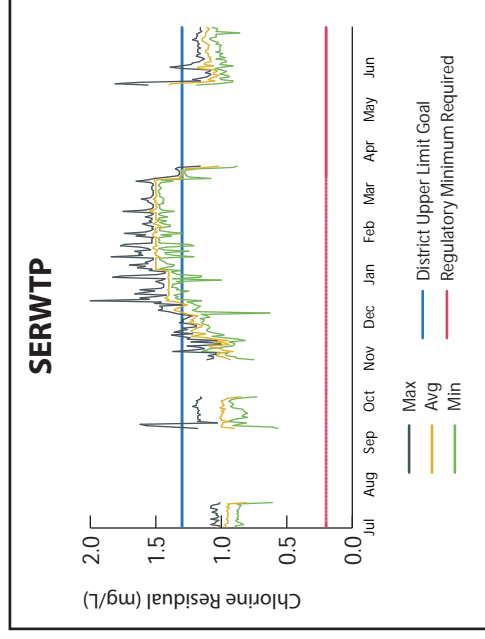
Month	Samples analyzed*	% Samples total coliform positive	# Samples fecal coliform positive	# HPC Samples Taken	# GWR Samples Taken	Free Chlorine Residual		
						Avg (mg/L)	Max (mg/L)	Min (mg/L)
July	109	1	0	1	10	0.58	1.52	0.04
August	99	0	0	4	0	0.51	0.96	0.03
September	116	0	0	0	0	0.63	1.24	0.05
October	111	0	0	5	0	0.61	1.04	0.01
November	103	0	0	1	0	0.66	1.29	0.01
December	98	0	0	2	0	0.84	1.44	0.03
January	102	0	0	3	0	0.75	1.92	0.00
February	103	0	0	0	0	0.68	1.54	0.14
March	103	0	0	0	0	0.62	1.51	0.08
April	109	0	0	0	0	0.52	1.06	0.08
May	110	0	0	0	0	0.65	1.50	0.10
June	127	0	0	0	0	0.71	1.18	0.17
Totals	1290	1	0	16	10			

*The number of samples collected and tested depends on the population served.

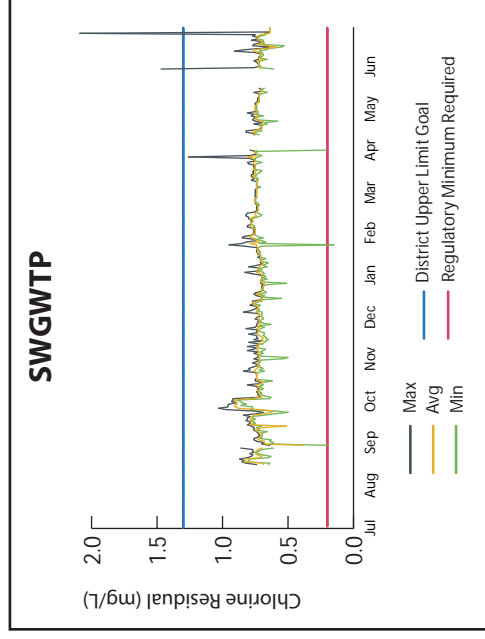
Chlorine Residual



Average residual for the year: 0.83 mg/L
 Maximum residual: 1.41 mg/L
 Minimum residual: 0.55 mg/L
 Goal achieved for the year: 91%



Average residual for the year: 1.24 mg/L
 Maximum residual: 2.00 mg/L
 Minimum residual: 0.63 mg/L
 Goal achieved for the year: 87%



Average residual for the year: 0.73 mg/L
 Maximum residual: 2.09 mg/L
 Minimum residual: 0.15 mg/L
 Goal achieved for the year: 94%

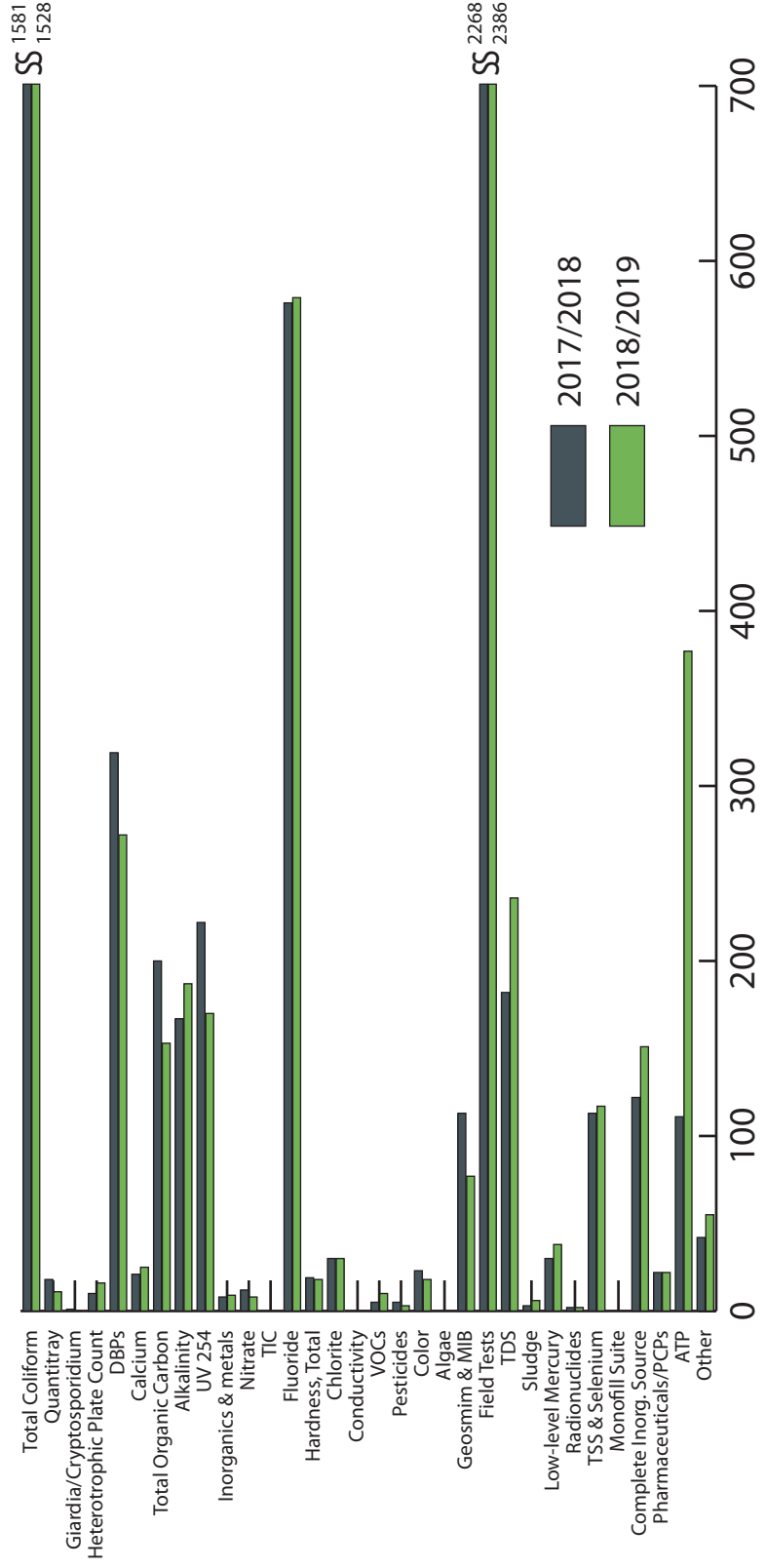
Total Samples Collected

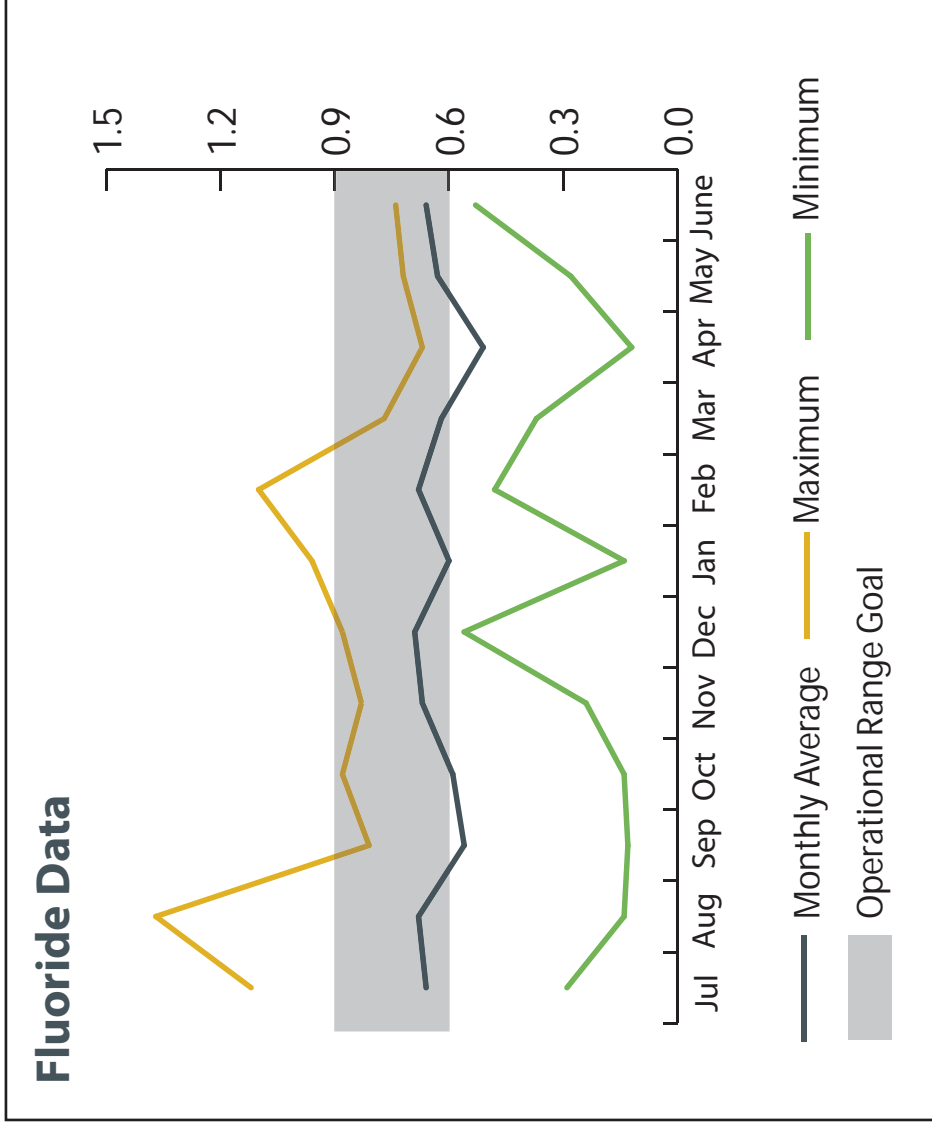
Sampling sites include JVVWTP, SERWTP, SWGWTP, distribution system, mountain streams, Jordan & Provo Rivers, and various sites in response to customer calls.

Total samples collected for FYE 2019: 6,504

Data includes samples collected by Operations and Compliance Section personnel.

- Wet Chemistry = pH, Alkalinity, Conductivity, Turbidity, TDS, Hardness, Color.
- Radionuclides = Radium 226 & 228, Gross Alpha, Gross Beta.
- "Other" = Nitrite sample for injection activity and sludge sample.

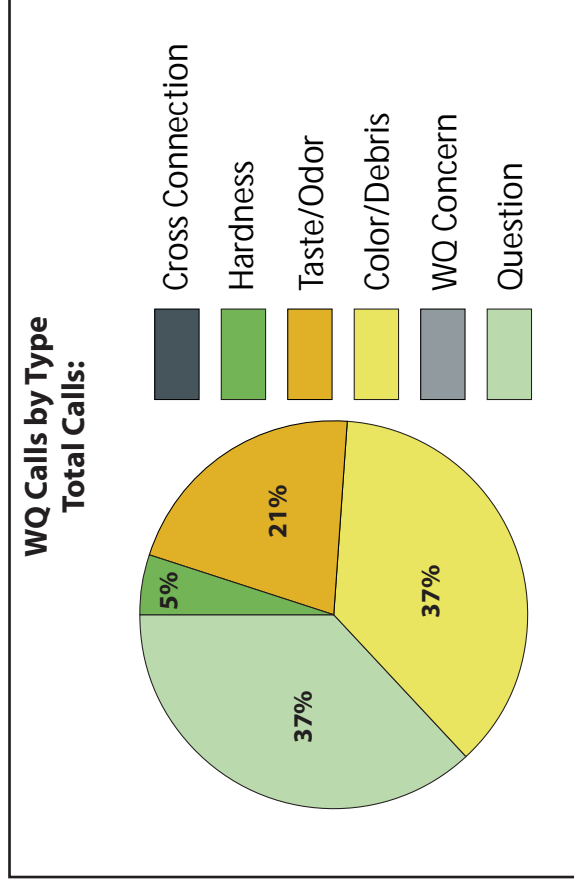




Fluoride is regulated on a county-wide basis by the Salt Lake Valley Health Department. Regulatory compliance is based on a system-wide annual average with a target of a daily average of 0.7 mg/L staying within the Operational Control Range of 0.6-0.9 mg/L.

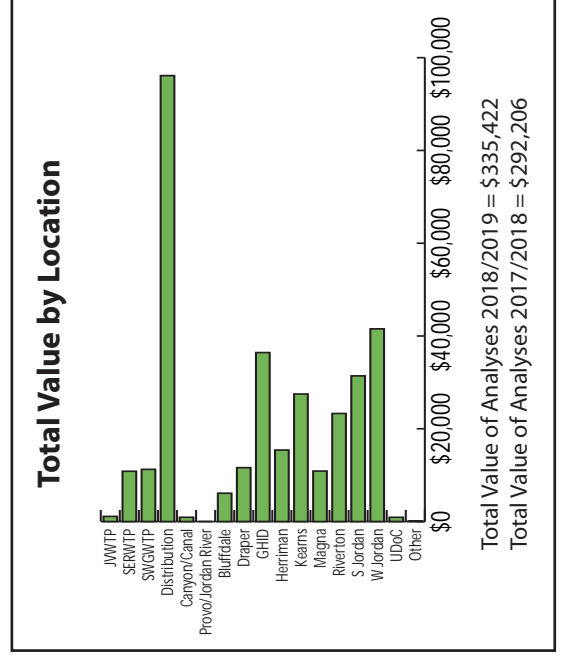
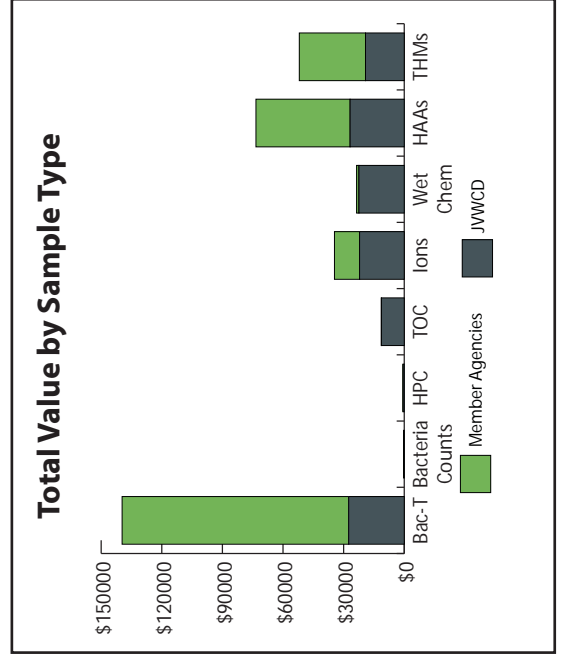
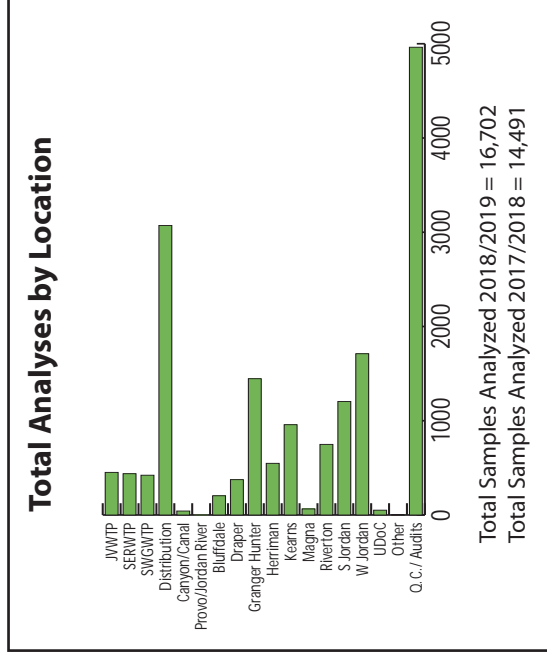
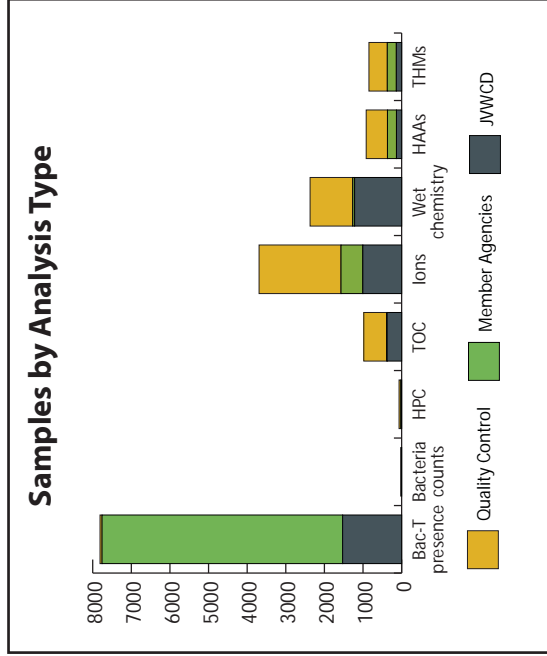
Water Quality Customer Call Data

Type of Call	Jul - Sep	Oct - Dec	Jan - Mar	Apr - June	FYTD
Cross Connection	0	0	0	0	0%
Hardness	0	0	0	1	5%
Taste/Odor	2	2	0	0	21%
Color/Debris	1	2	0	4	37%
WQ Concern	0	0	0	0	0%
Question	1	0	3	3	37%
Total Calls	4	4	3	8	19



The public perceives water quality as the look, taste and feel of their water. The experience a resident has when he or she calls with a concern, question or complaint helps determine Jordan Valley Water's credibility in the community. These calls are logged and tracked in a database, which allows us to determine response time and trends. A summary of the types of calls received is below.

The Laboratory (Lab) provides analysis services and general support for several departments of Jordan Valley Water. This allows Jordan Valley Water to lower the budget required for outside analysis and provide customized service. While it is not feasible for the Lab to run every test required for Jordan Valley Water's various monitoring programs, it does maintain certification for the analyses that represent the largest load. The Lab also provides analytical services for many of Jordan Valley Water's member agencies at discounted prices.



Location	Well Capacity (cfs)	Flow rate w/standby or portable generators (cfs)	2018-19 Avg Flow Rate (cfs)	2018-19 Days of Operation	2018-19 Annual Production (AF)	2017-18 Annual Production (AF)	2016-17 Annual Production (AF)	2018-19 Total Power Cost	2018-19 Average Cost/AF	2018-19 Water Level (feet above pump)											
										Max	Min	Avg									
1	2500 E. Creek Rd	2.79	N/A	73	401.67	497.70	72.10	\$ 20,826.26	\$ 51.85	95	53	84									
2	1787 E. Creek Rd	5.01	N/A	0	0.00	0.00	0.00	\$ 2,323.76	\$ 0.00	292	269	281									
3	7751 S. 1300 East	4.01	N/A	0	0.00	0.00	0.00	\$ 647.51	\$ 0.00	164	101	140									
4	7750 S. 1000 East	3.11	N/A	0	0.00	0.00	26.00	\$ 123.12	\$ 0.00	N/A	N/A	N/A									
5	8200 S. 1000 East	2.01	N/A	4	0.00	0.00	0.00	\$ 198.88	\$ 0.00	189	139	172									
6	7700 S. 700 East	5.57	N/A	12	97.64	150.00	481.00	\$ 8,535.52	\$ 87.42	221	124	204									
7	8201 S. 700 East	2.23	N/A	0	0.00	0.00	93.60	\$ 594.05	\$ 0.00	262	240	253									
8	1200 E. 9400 South	1.78	N/A	0	0.00	0.00	0.00	\$ 532.21	\$ 0.00	209	123	151									
9	1364 E. 6400 South	6.00	6.0*	122	738.66	735.41	1,577.80	\$ 50,925.21	\$ 68.94	175	43	132									
10	8651 S. 1300 East	4.00	N/A	0	0.00	0.00	0.00	\$ 178.42	\$ 0.00	173	158	173									
11	8148 S. 1330 East	7.00	N/A	0	0.00	277.00	0.00	\$ 4,797.40	\$ 0.00	240	157	213									
12	1307 E. 6860 South	4.70	N/A	17	151.02	460.70	939.60	\$ 10,125.89	\$ 67.05	189	78	169									
13	9125 S. 500 West	2.01	N/A	0	0.00	0.00	0.00	\$ 1,529.33	\$ 0.00	63	61	62									
14	2090 E. 8600 South	2.45	N/A	0	0.00	0.00	0.00	\$ 2,148.12	\$ 0.00	223	149	212									
15	1500 E. 9400 South	9.50	N/A	114	2,175.67	0.00	0.00	\$ 144,302.97	\$ 66.33	179	58	144									
16	1530 W. 14600 South	4.46	N/A	0	0.00	177.90	699.80	\$ 2,680.70	\$ 0.00	147	144	145									
17	300 E. 4500 South	0.70	N/A	0	0.00	0.00	0.00	\$ 864.34	\$ 0.00	N/A	N/A	N/A									
18	9390 S. Solena Way	4.80	N/A	0	0.00	0.00	733.00	\$ 439.48	\$ 0.00	127	109	119									
19	2300 E. 9800 South	4.12	N/A	0	0.00	0.00	361.50	\$ 2,594.99	\$ 0.00	165	143	148									
20	1155 E. Webster Dr.	6.50	N/A	16	251.40	118.80	0.00	\$ 25,780.19	\$ 102.55	178	92	168									
21	9003 S. Quail Hollow	2.20	N/A	87	349.75	442.90	332.90	\$ 40,764.24	\$ 116.55	211	38	173									
22	1600 E. Siesta Drive	9.60	N/A	52	764.24	2,885.13	3,101.40	\$ 62,871.21	\$ 82.27	211	20	175									
23	1526 E. 8600 South	8.50	N/A	115	1,935.37	0.00	2,008.00	\$ 165,237.70	\$ 85.38	192	47	147									
24	8518 S. 960 East	6.00	N/A	71	787.80	0.00	308.00	\$ 53,454.68	\$ 67.85	218	34	138									
25	1159 E. 4500 South	2.20	N/A	0	0.00	11.10	531.30	\$ 907.79	\$ 0.00	243	203	229									
26	1850 E. Newbury Dr.	8.90	8.9*	0	0.00	0.00	0.00	\$ 545.03	\$ 0.00	159	144	153									
27	275 E. Carol Way	2.89	N/A	47	152.64	0.00	32.00	\$ 15,279.73	\$ 100.10	359	243	338									
28	4670 S. 1590 East	3.78	N/A	88	409.77	200.00	212.00	\$ 30,181.72	\$ 73.66	436	225	390									
29	1028 E. College Dr.	4.01	N/A	67	293.24	331.00	0.00	\$ 20,127.66	\$ 68.64	368	295	348									
30	1784 E. Creek Rd	7.13	N/A	52	778.13	1,536.20	1,643.70	\$ 67,278.46	\$ 86.46	400	221	367									
31	8578 S. Monitor Dr.	8.00	8.0*	0	0.00	0.00	2,009.10	\$ 4,996.78	\$ 0.00	180	135	165									
32	Prison Well***	0.89	N/A	47	51.74	46.39	36.47	\$ ***	\$ ***	N/A	N/A	N/A									
Totals/Averages:										146.85	22.90	4.94	62.47	9,287.00**	7,823.24**	15,162.80**	\$ 741,793.35	\$ 80.36	N/A	N/A	N/A

Note: Cost per AF and water levels are a fiscal year average; all information based on a "power read" month.
 * Requires portable generators.
 ** This number is taken from monthly power reads and is different from the monthly numbers reported on page 4 because of fluctuating power month reads.
 *** Owned by the Utah State Department of Corrections (not included in Totals/ Averages). Power costs paid by the Utah State Department of Corrections.

	Location	Current Capacity (cfs)	Flow rate w/standby or portable generators (cfs)	Total Horse-power	Average Dynamic Lift (feet)	2018-19 Average Flow Rate (cfs)	2018-19 Annual Production (AF)	2017-18 Annual Production (AF)	2016-17 Annual Production (AF)	2018-19 Total Power Cost	2018-19 Average Cost/AF	2018-19 Days of Operation
1	4706 Naniloa Drive	12	N/A	300	N/A	N/A	0.00	0.0	0.0	\$ 1,801.26	\$ 0.00	0
2	4500 S. 4800 West	49	13.5	1625	200	13.0	5,139.1	6,811.6	6,559.7	\$ 130,567.87	\$ 25.41	308
3	6200 S. 3200 West	46	13.8	1500	180	13.0	5,868.4	9,545.6	9,276.0	\$ 129,277.20	\$ 22.03	226
4	3600 W. 10200 South	45	4.3*	1900	350	8.0	3,992.0	6,652.2	6,862.7	\$ 202,892.84	\$ 50.83	346
5	5700 W. 10200 South	22	N/A	750	240	5.0	519.5	3,008.8	2,753.6	\$ 47,282.35	\$ 91.02	57
6	5820 S. 3800 West	25	15.3*	650	180	11.0	2,993.2	3,537.0	3,341.9	\$ 110,613.46	\$ 36.96	225
7	110 E. 11400 South	24	5.0	1200	320	9.5	883.7	1,417.6	102.3	\$ 34,876.21	\$ 39.47	125
8	11574 S. 2580 East	4	N/A	170	260	N/A	0.0	0.0	0.0	\$ 0.00	\$ 0.00	0
9	15305 S. 3200 West	8	3.1	400	280	2.4	1,166.1	506.6	496.0	\$ 33,818.06	\$ 29.00	365
10	3145 W. 11400 South	42	9.3*	900	110	6.0	5,354.4	5,032.8	1,774.9	\$ 124,789.65	\$ 23.31	190
11	10730 S. 1300 East	22	N/A	400	100	N/A	3,306.9	0.0	1,240.0	\$ 32,094.34	\$ 9.71	210
12	13400 S. 3300 West	30	8.2*	2400	495	9.7	5,080.4	4,879.4	4,562.4	\$ 287,672.13	\$ 56.62	365
13	3200 W. 11800 South	36	17.8	3000	495	12.0	8,378.2	8,068.1	9,356.9	\$ 502,237.58	\$ 59.95	354
14	6924 Old Bingham Hwy	20	10.1	800	280	9.0	1,121.3	1,828.9	2,374.9	\$ 46,752.71	\$ 41.70	110
Totals/Averages:		385	100.4	15,995	268	9.0	41,803.0	51,288.6	48,701.3	\$ 1,684,675.66	\$ 34.71	205.79

Note: Cost per AF is a fiscal year average; all information is based on a "power read" year.

* Requires portable generators.

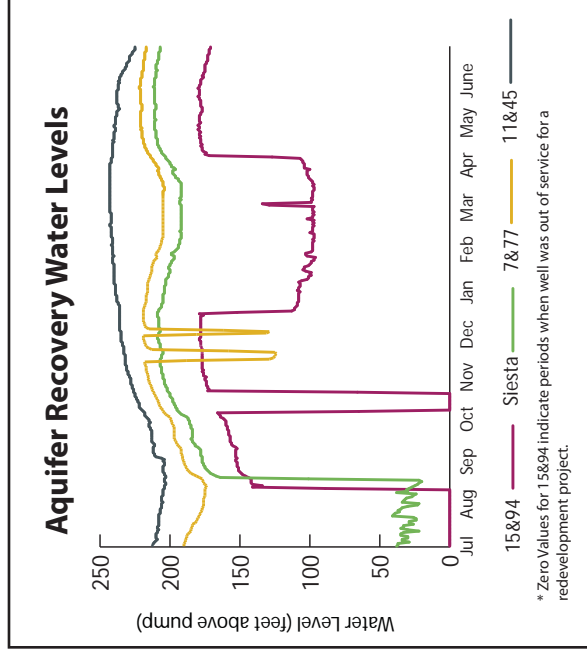
	Injected for underground storage (AF)	108th So. (north flow)	Total	Net Saved ^a	Total Well Production
Jul	0.00	226.20	226.20	226.20	2,064.06
Aug	0.00	0.00	0.00	0.00	1,847.43
Sep	0.00	370.51	370.51	370.51	500.37
Oct	0.00	223.22	223.22	223.22	33.93
Nov	0.00	122.48	122.48	122.48	135.48
Dec	0.00	118.93	118.93	118.93	359.04
Jan	0.00	9.57	9.57	9.57	1,219.54
Feb	0.00	0.00	0.00	0.00	1,416.51
Mar	0.00	0.00	0.00	0.00	1,375.47
Apr	0.00	155.87	155.87	155.87	275.83
May	0.00	540.20	540.20	540.20	0.00
June	78.85	747.41	826.26	747.41	0.00
Yearly Totals	78.85	2,514.39	2,593.24	2,514.39	9,227.66

^aThese totals are based on calendar months, not power months.

ASR Water Quality Summary

Monitoring and reporting for the Aquifer Storage & 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 JWTP or SERWTP and meets all drinking water regulations since the water is injected directly from the distribution system.

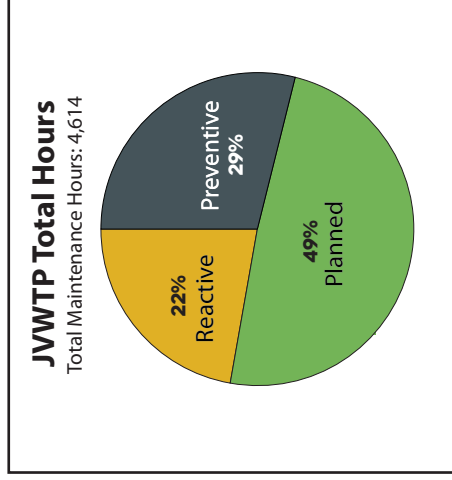
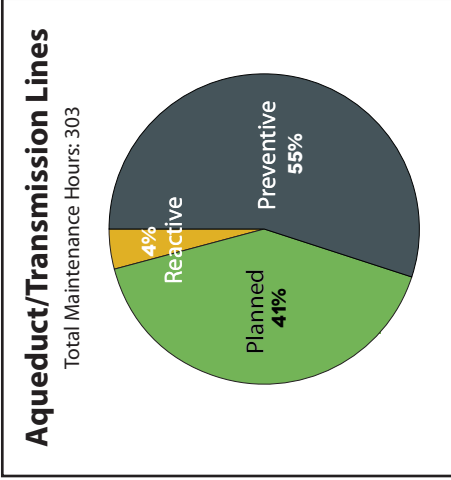
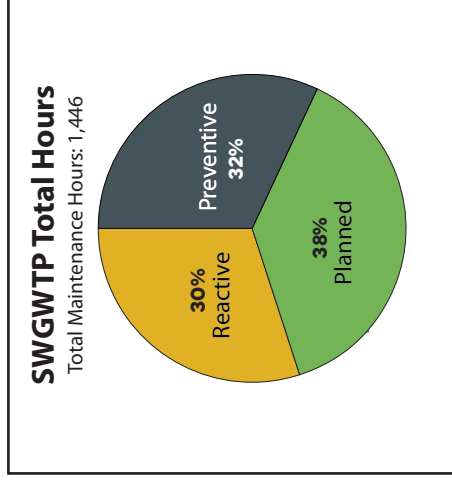
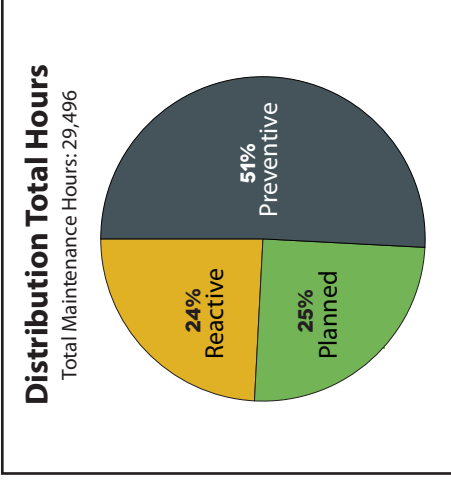
a) 10800 S 1300 E is the flow control/pump station on the 30-inch 1300 East pipeline between 11400 South and 9400 South. This pipeline and station allow Jordan Valley Water to convey water from either of its treatment plants to areas that before could only be fed by running wells (or buying water from MWDLSLs). 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.



This graph shows a year's sample of ground water 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.

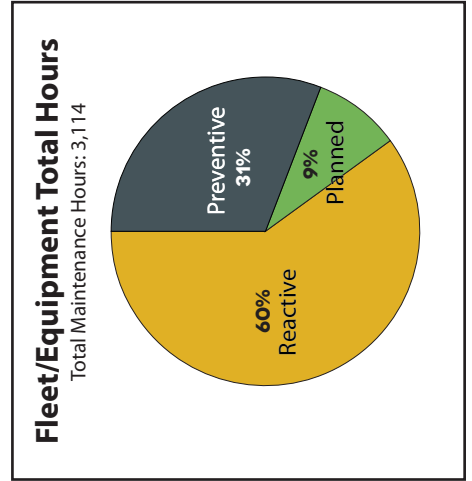
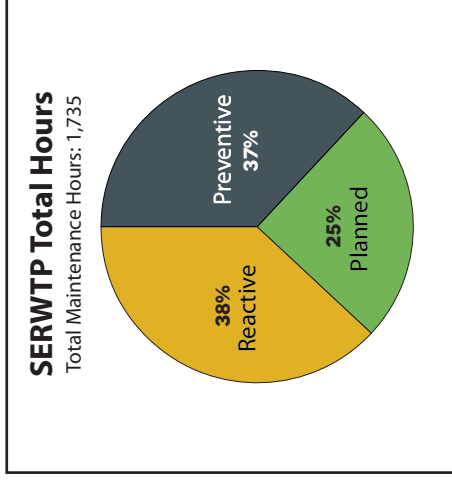
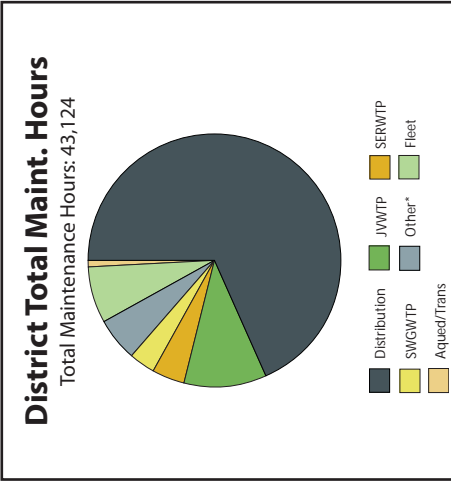
Address (Common)	Steel	Concrete	Year Built
7850 W 10200 S (Zone D) basins 1 & 2		3 MG	2008
		3 MG	
2718 E Durban Rd (2300 E 9800 S)	1 MG		1956
	2 MG		1964
9785 S Eastdell Dr (2300 E 9800 S)		6 MG	1970
4772 S Naniloa Dr (Casto Reservoir)		2 MG	1962
6171 S 3200 W (32 & 62)	8 MG		1968
	2 MG (E)		1961
	2 MG (W)		1964
5211 W 6200 S (52 & 62)		2 MG	1962
6011 W 4700 S (60th West)	1 MG		1956
		2MG	1962
4408 S 4800 W (48th & 45th)		6 MG	1966
	1 MG		1956
	2 MG		1956
	5 MG (E)		1965
3582 W 10200 S (36 & 102)			1969
		3 MG	1981
5631 W Old Bingham (57th & 102)		3 MG	1981
6924 W Old Bingham (Old Bingham)		3 MG	1976
		16.5 MG	1984
3185 W 5820 S (Terminal)		16.5 MG	1984
		33 MG	1997
		33 MG	1997

Address (Common)	Steel	Concrete	Year Built
14271 S State St (Prison/Minuteman)		W-400k	1950
		E-200k	1930
11574 S Wyndcastle (SERWTP)		1 MG	1983
		3 MG	2003
15305 S 3200 W (JVWTP)		1 MG	1974
		8 MG	1974
	1 MG		1974
14408 S 5600 W (Rosecrest)		12 MG	2016
		3 MG	2000



By focusing on planned, predictive and preventive maintenance, Jordan Valley Water is taking proactive steps to reduce unscheduled downtime and avoidable failures that significantly increase costs and reduce reliability of equipment and services.

*JNPS, Terminal Reservoir, Admin, and Education Center



Vehicle Summary

VEH#/YR	MAKE & MODEL	END ODOM	GALLONS USED	MILES DRIVEN	MPG	MAINT. COSTS FYTD
Operations						
103-2008	Chv 4x4 Trailblazer	124,227	667.7	10,602	15.9	55.15
105-2001	Chv Impala	102,344	379.8	7,138	18.8	190.60
118-2008	Ford 4x4 Expedition	143,988	246.3	3,370	13.7	153.40
203-2009	Chv 1/2 Ton 4x4 Pk	91,361	797.4	9,533	12.0	142.65
239-2005	Chv Colorado 4X4	129,249	144.3	2,308	16.0	69.20
246-2008	Chv 3/4 Ton Ext 4X4	83,286	558.7	6,447	11.5	92.37
258-2008	Chv 1/2 Ton Pickup	114,301	862.3	9,548	11.1	132.28
701-2011	Ddg 1/2 Ton Ext 4x4	101,829	858.5	11,014	12.8	243.62
702-2011	Ddg 1/2 Ton Ext 4x4	117,516	797.3	9,948	12.5	900.92
703-2014	Ford 1/2 Ton Ext 4x4	68,231	917.6	11,726	12.8	306.02
704-2014	Ford Explor 4x4 SUV	79,910	819.7	14,738	18.0	53.16
712-2015	Chv Ext Cab 4X4 PU	51,041	909.0	12,875	14.2	102.82
716-2015	Ford Explor 4x4 SUV	30,376	402.5	7,503	18.6	122.19
718-2016	Ford F150 Ex 4X4	42,875	980.5	13,867	14.1	491.49
720-2016	Ford F150 Ex 4X4	23,447	880.9	12,785	14.5	44.39
723-2016	Ford Explorer	34,146	512.8	11,272	22.0	158.46
725-2017	Ford Explorer	19,735	262.7	4,900	18.7	176.48
726-2018	Ddg1/2 Ton 4x4 Pk	13,441	866.7	13,441	15.5	0.00
727-2018	Ddg1/2 Ton 4x4 Pk	4,104	287.1	4,104	14.3	0.00
Totals	20 Vehicles		12,375.2	180,971	14.6	\$3,557.49

VEH#/YR	MAKE & MODEL	END ODOM	GALLONS USED	MILES DRIVEN	MPG	MAINT. COSTS FYTD
Administration						
106-2004	Chev 4x4 Tahoe	119,919	495.9	7,643	15.4	1,235.62
211-2003	Chv 1/2 Ton Pickup	103,725	315.4	5,065	16.1	123.73
731-2018	Ford Fusion Sedan	3,481	91.9	3,481	37.9	0.00
Totals	3 Vehicles		903.1	16,189	17.9	\$1,359.35

VEH#/YR	MAKE & MODEL	END ODOM	GALLONS USED	MILES DRIVEN	MPG	MAINT. COSTS FYTD
IT/Electronics						
117-2005	Chev 4x4 Tahoe UL	148,080	467.7	7,252	15.5	269.70
228-2009	Chv 3/4 Ton Ext 4x4	106,128	992.1	11,464	11.6	139.96
229-2009	Chv 3/4 Ton Ext 4x4	96,079	753.9	9,221	12.2	48.24
248-2008	Chv 3/4 Ton Ext 4x4	117,698	786.3	9,271	11.8	129.77
256-2008	Chv 3/4 Ton Ext 4x4	102,192	567.9	6,498	11.4	44.13
710-2015	Ford F250 Supr Cab	39,834	796.2	8,684	10.9	173.06
Totals	6 Vehicles		4,364.1	52,390	12.0	\$804.86

5-Year Totals

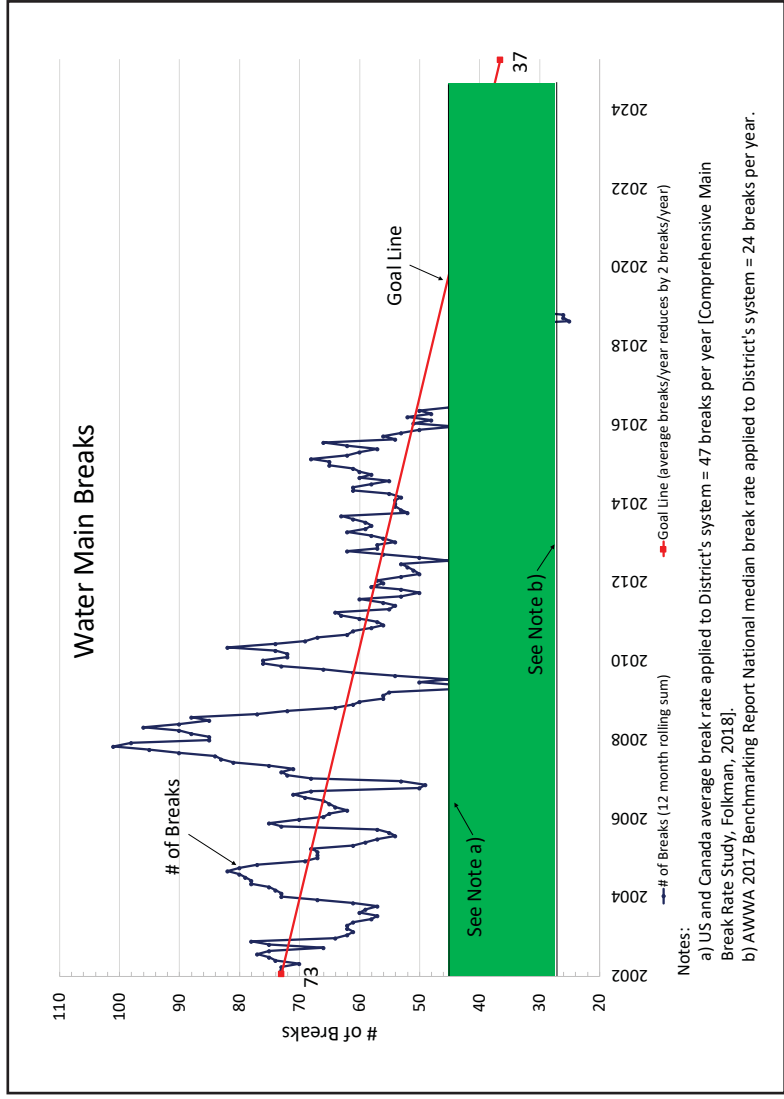
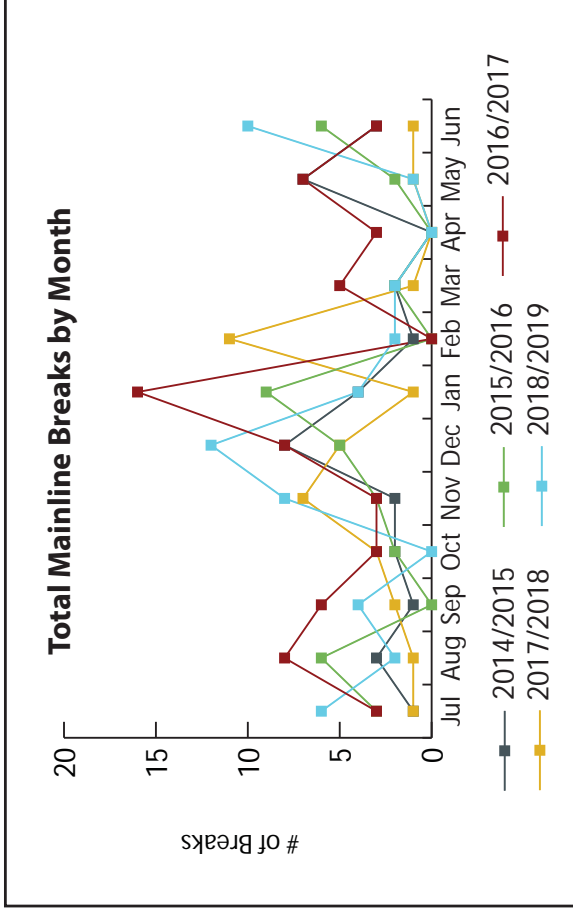
Year	Gallons Used	Miles Driven	MPG	Maint. Cost	Fleet Size
2018/2019	50,840	555,974	10.9	\$36,943.05	66
2017/2018	59,270	541,208	9.78	\$36,220.34	66
2016/2017	55,512	554,480	9.98	\$27,892.40	71
2015/2016	55,438	551,402	9.95	\$53,836.47	70
2014/2015	52,030	530,237	10.19	\$34,610.23	75

VEH#/YR	MAKE & MODEL	END ODOM	GALLONS USED	MILES DRIVEN	MPG	MAINT. COSTS FYTD
Maintenance						
201-2009	Chv 1/2 Ton 4x4 UL	120,806	539.8	7,144	13.2	72.94
202-2009	Chv 1/2 Ton 4x4 UL	82,896	986.1	14,921	15.1	986.00
238-2005	Chv 1/2 Ton Pickup	101,475	344.6	5,310	15.4	168.45
247-2008	Chv 3/4 Ton Ext 4x4	139,581	1221.4	11,758	9.6	381.79
251-2006	Chv 1 Ton 4x4	110,777	573.0	5,085	8.9	169.50
254-2007	Chv 3/4 Ton 4x4	101,599	917.8	9,134	10.0	258.69
257-2008	Chv 1/2 Ton Pickup	98,633	631.9	9,576	15.2	153.42
259-2008	Chv 1/2 Ton Ext 4x4	72,221	710.4	6,220	8.8	366.91
260-2008	Chv 3/4 Ton Ext 4x4	155,807	1,131.6	13,280	11.7	739.08
300-2004	Ford F550 Svc Truck	109,932	1524.6	14,352	9.4	2,791.21
301-2008	Ford F550 Svc Truck	130,887	1,400.1	7,677	5.5	4,666.04
308-2008	Ford F550 Svc Truck	122,052	1,595.7	8,495	5.3	5,553.37
311-2009	Ddg 5500 Dump	82,913	577.0	4,580	7.9	3,530.70
313-2008	Ddg Ram 5500	118,717	1,060.9	10,052	9.5	620.51
406-1999	4900 Dmp Trk Desl	75,341	1,715.5	2,007	11.7	510.34
409-2004	4400 Dmp Trk Desl	51,936	381.6	2,066	5.4	347.49
410-2009	7600 Dump Truck	46,674	1,246.6	3,715	3.0	138.17
411-2009	7600 Dump Truck	45,099	1,253.5	3,980	3.2	682.07
412-2015	7600 Dump Truck	15,748	1,219.0	4,252	3.5	29.94
413-2018	Mack Vac Truck	7,481	1,326.1	2,539	1.9	264.51
700-2011	Ddg NITRO SE 4X4	98,254	706.4	11,850	16.8	186.41
705-2014	Ford F150 PL14	41,852	623.9	8,756	14.0	338.78
706-2015	Ford F550 Svc Truck	44,616	1,173.1	8,688	7.4	766.90
707-2015	Ford F350 Svc Truck	35,335	708.6	6,625	9.3	185.05
708-2015	Chev Colorado 4x4	23,996	865.6	15,887	18.4	126.92
709-2015	Chv Colorado 4x4	32,319	263.8	4,341	16.5	176.72
711-2015	Ford F350 Supr Cab	27,251	796.4	5,648	7.1	655.91
713-2015	Chv Ext Cab 4x4	59,596	1,119.9	15,780	14.1	923.65
714-2015	Chv Ext Cab 4x4	48,808	975.1	10,295	10.6	769.88
717-2015	Ford Ex 4x4 Sub 15	25,548	376.5	6,275	16.7	122.29
719-2016	Ford F150 Ex 4x4	46,179	897.0	15,266	17.0	1,573.43
721-2016	Ford F250 Svc Truck	30,300	948.8	9,972	10.5	234.82
722-2016	Ford F350 Dmp Cab	26,786	853.2	7,604	8.9	1,331.34
724-2016	Ford F350 Svc Truck	20,584	1,136.0	8,064	7.1	1,297.52
728-2018	Ddg 1/2 Ton Ext 4x4	6,303	399.1	6,303	15.8	0.00
729-2018	Ford F550 Svc Truck	9,707	1,338.7	9,707	7.3	50.30
730-2018	Ford F550 Svc Truck	9,220	1,202.0	9,220	7.7	50.30
Totals	37 Vehicles		33,197.3	306,424	9.2	\$31,221.35

Pipeline 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 by the attached chart, has been set to reduce and keep the number of breaks incurred each year to a more manageable/acceptable level.

- Total main line breaks for 2018/2019 = 34
- Total main line breaks for 2017/2018 = 36
- Total main line breaks for 2016/2017 = 38
- Total main line breaks for 2015/2016 = 51
- Total main line breaks for 2014/2015 = 66



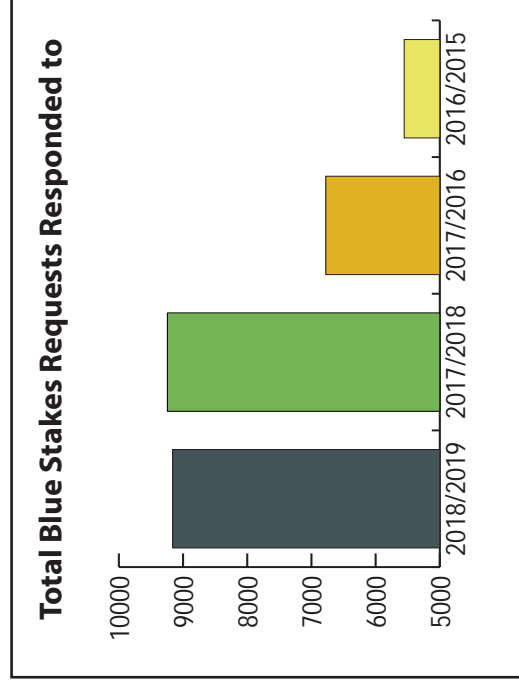
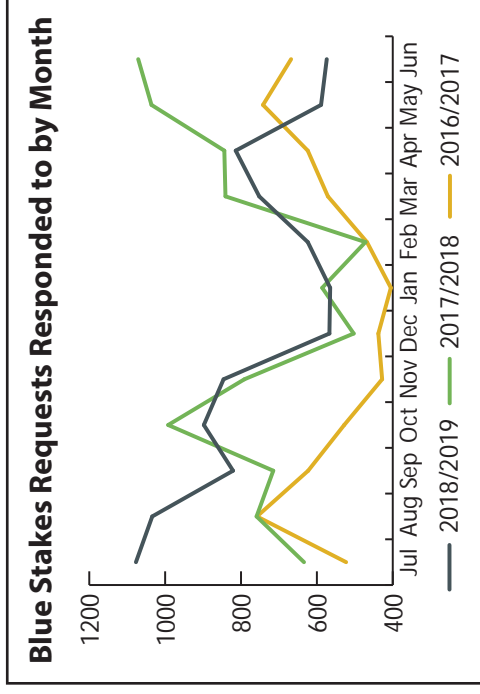
Notes:
 a) US and Canada average break rate applied to District's system = 47 breaks per year [Comprehensive Main Break Rate Study, Folkman, 2018].
 b) AWWA 2017 Benchmarking Report National median break rate applied to District's system = 24 breaks per year.

Pipeline/Valve Summary

Pipe diameter	Pipe length (linear ft.)	Miles of pipe	# of Valves	Percent of System
<2 inch	1,261	0.24	6	0.07%
2 inch	3,480	0.66	53	0.19%
3 inch - 4 inch	22,831	4.32	575	1.25%
6 inch	309,775	58.67	2,220	16.98%
8 inch	281,195	53.26	985	15.42%
10 inch	73,749	13.97	179	4.04%
12 inch	88,066	16.68	312	4.83%
14 inch	21,050	3.99	44	1.15%
16 inch	144,443	27.36	121	7.92%
18 inch	113,146	21.43	57	6.20%
20 inch - 21 inch	63,502	12.03	48	3.48%
24 inch	146,116	27.67	110	8.01%
27 inch	16,543	3.13	2	0.91%
28 inch	254	0.05	67	0.01%
30 inch	94,233	17.85	1	5.17%
33 inch	79,900	15.13	10	4.38%
36 inch	48,043	9.10	22	2.63%
42 inch	8,576	1.62	19	0.47%
48 inch	85,586	16.21	3	4.69%
54 inch	4,006	0.76	34	0.22%
60 inch	6,005	1.14	2	0.33%
66 inch	51,545	9.76	4	2.83%
69 inch	654	0.12	2	0.04%
72 inch	79,408	15.04	6	4.35%
78 inch	79,833	15.12	5	4.38%
84 inch	313	0.06	1	0.02%
90 inch	594	0.11	1	0.03%
Totals	1,824,106	345.47	4,889	100%
Total fire hydrants			1,443	

Updated 7/19/19

Blue Stakes Summary



Retail System Connections Information

Retail service connections	2018/2019	2017/2018	2016/2017	2015/2016	2014/2015
Residential (single family or duplexes)	7,423	7,381	7,349	7,303	7,248
Residential (apartments)	266	266	265	264	264
Commercial, industrial, institutional	1,211	1,201	1,204	1,193	1,192
Fire lines	304	293	289	279	280
TOTAL CONNECTIONS	9,204	9,141	9,107	9,039	8,984
Increase/decrease in active retail connections	63	34	68	55	49

*Large water users include apartments and commercial & industrial businesses.
Changes in numbers from previous years is due to more accurate data being made available.

New Installed Retail Connections

Month	All connections are made by contractors										Totals
	3/4"	1"	1.5"	2"	3"	4"	6"	8"			
July					1						1
August					1						1
September	5										5
October	32										32
November	2			1	1						4
December											
January				1							1
February	1										1
March	2										2
April	44		2								46
May	1										1
June											
Totals	87	0	2	2	2	1	0	0	0	0	94

Total new retail connections for 2018/2019 = 94
 Total new retail connections for 2017/2018 = 47
 Total new retail connections for 2016/2017 = 35
 Total new retail connections for 2015/2016 = 66
 Total new retail connections for 2014/2015 = 30



Localscapes

Localscapes is a new approach to water-efficient landscaping designed for Utah. A Localscapes uses 1/3 the water of a typical Utah landscape.

Total Class Attendees

Class and Program Participants*	FY 18/19	FY 17/18
Localscapes 101 Students	2,814	1,968
Localscapes University Graduates	934	688
Design Workshop Students	274	141
Irrigation Workshop Students	209	190

*These numbers represent a running total and carry over from year to year.

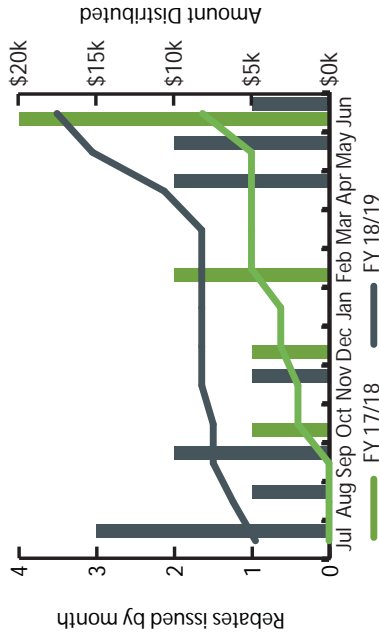
Localscapes Partners

Partnership Categories	FY 18/19	FY 17/18
Founding Partners	4	4
Agency/Educational Partners	2	1
Professional Partners	31	21
Retail Partners	10	9
Total Partners	47	35

Localscapes University Rewards

	FY 18/19	FY 17/18
# of Rewards Issued	12	8
Square Feet Converted	69,279	32,557
Average Reward Amount	\$1,458.58	\$1,017.41
Total Rebates Distributed	\$17,502.96	\$8,139.25

Localscapes University Rewards by Month





Utah Water Savers

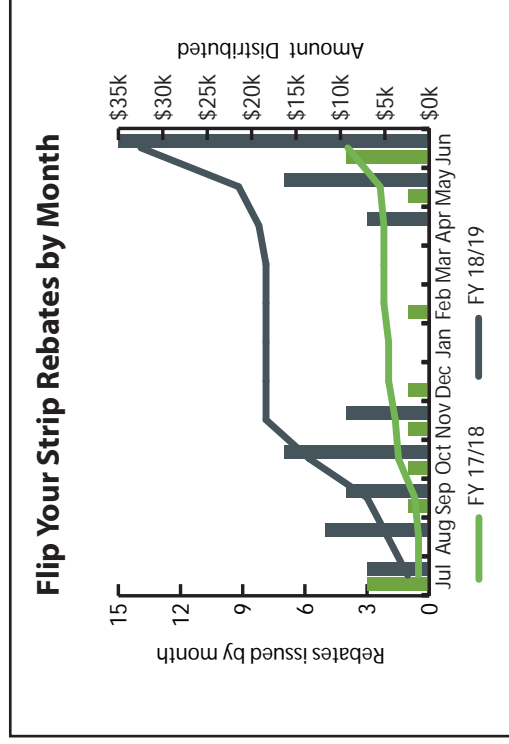
Utahwatersavers.com was launched in May of 2017. In 2018, the website was expanded in partnership with Division of Water Resources to host additional statewide rebate programs. Currently the following programs are managed through the Utah Water Savers website: Localscapes Rewards, Flip Your Strip, Toilet Replacement Rebates, Smart Controller Rebates, and Landscape Consultations.

Landscape Consultations

Class and Program Participants	FY 18/19	FY 17/18
Completed Consultations	167	56

Statewide Rebate Programs

Class and Program Participants	FY 18/19
Toilet Replacement Program	117
Smart Controller Rebates	1,483

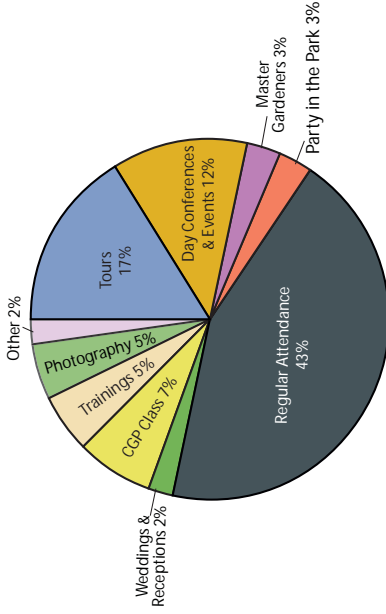


Flip Your Strip

	FY 18/19	FY 17/18
# of Rebates Issued	48	13
Square Feet Converted	26,495	6,474.5
Average Rebate Amount	\$676.28	\$705.58
Total Rebates Distributed	\$32,461.63	\$9,172.50

Conservation Garden Park

Classes held at the Garden are generally free to the public and cover topics geared toward homeowners. Class schedules are distributed each year throughout Jordan Valley Water's service area and are available online at ConservationGardenPark.org.



Total 2018 Garden Attendance: 36,594

Year	Total Attendance	# of Classes	Class Attendance	% of available seats filled
2018	36,594	47	2,324	76%
2017	40,508	46	2,168	73%
2016	35,835	45	1,707	73%
2015	30,627	53	2,111	63%

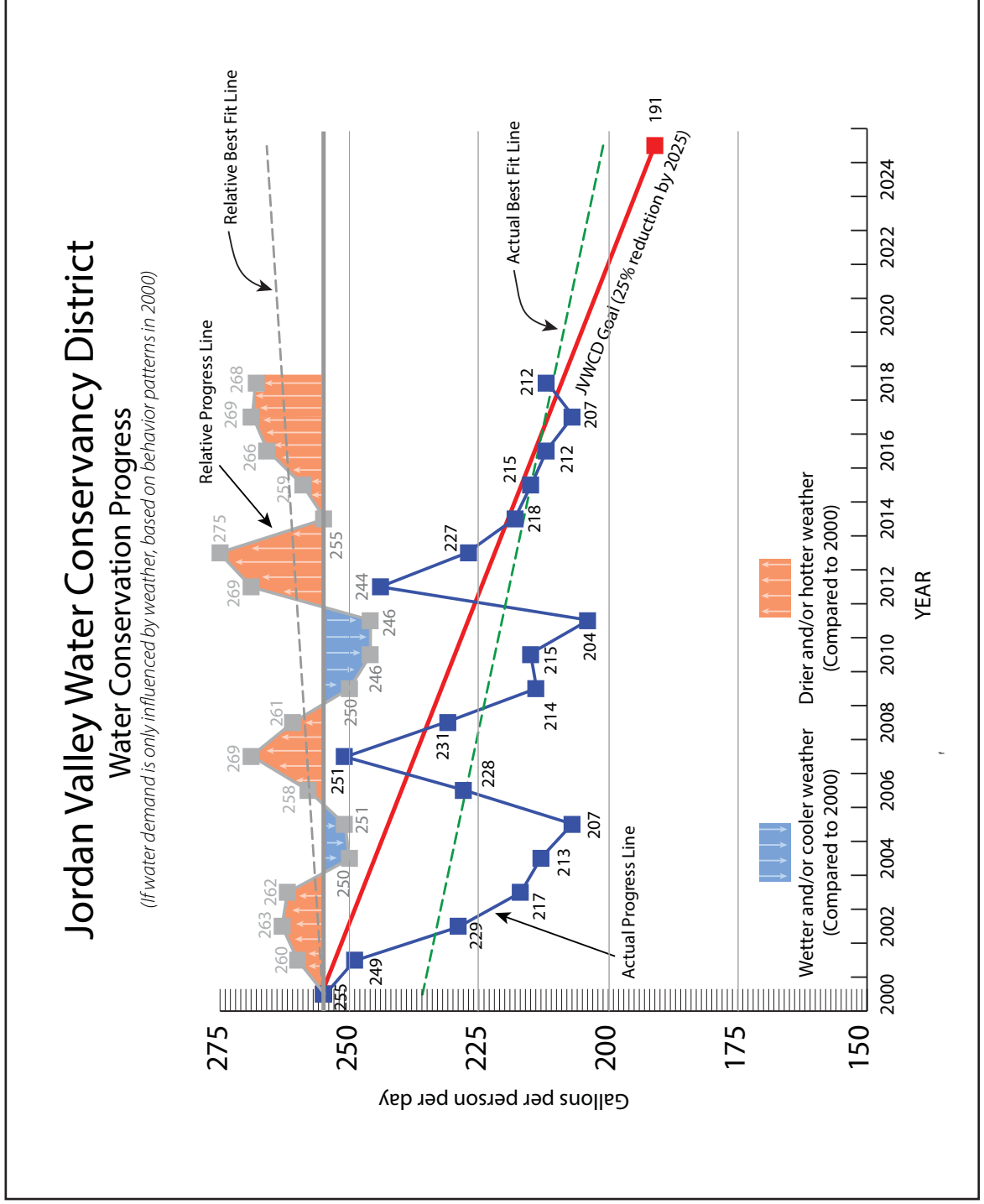
Member Agency Grant Program

Member Agency	Public Education	Product Rebates	Landscape Improvements	Conservation Website	Soil Moisture Sensors	Studies & Reports	Secondary Metering	Scholarship	Water System Audit	Advanced Metering Inf
Bluffdale			2006			2008	2018			
Draper City			2015							
Draper Irr.	2011									
GHID	2006, 2008, 2009, 2011, 2013, 2015, 2017, 2018, 2019	2009, 2011, 2017, 2018, 2019	2015, 2017, 2018, 2019			2006	2013, 2017, 2018, 2019		2017	2017, 2018, 2019
Kearns		2006, 2008, 2009, 2011, 2013, 2015, 2017, 2018, 2019	2006, 2017			2017			2017	
Magna				2006	2006		2013			
S Jordan	2006	2008, 2009, 2011, 2013, 2015, 2017, 2018, 2019	2006, 2009, 2015, 2017, 2018	2015		2006, 2011		2015, 2017		
S Salt Lake			2011, 2017							
TBID			2015			2015				
W Jordan	2006, 2006, 2009	2006	2008, 2009			2008, 2009, 2015, 2017, 2018				

Jordan Valley Water requires ongoing reporting and water use tracking from participating agencies.

Water Conservation Goal

Jordan Valley Water has a long term goal to decrease per capita water usage 25% by 2025. While this number tends to fluctuate from year to year based on weather conditions, a gradual decline in the average of all years combined shows that conservation progress is being made.

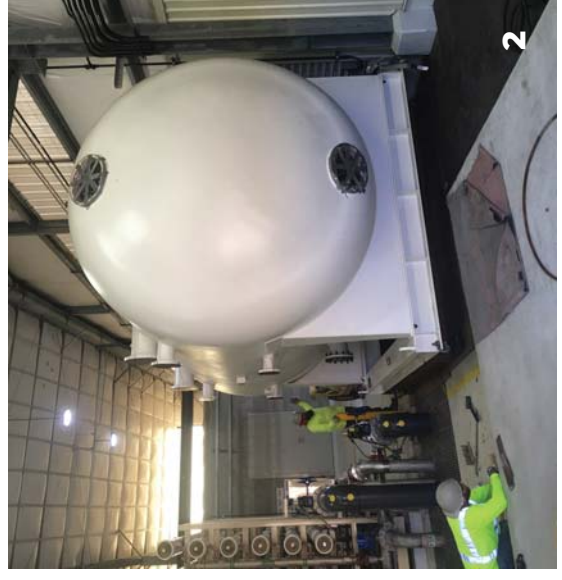


Capital Projects

Engineering projects for 2018/2019 are summarized on Jordan Valley Water's website under "Engineering Projects." (<http://www.jvwcd.org/public/completed>)

Projects completed this year include:

- **11800 South/U-111 Pipeline** (Photo 1 - 48" diameter pipe line at the intersection of 11800 South and U-111)
- **Bingham Canyon Manganese Filters** (Photo 2 - Setting of pressure vessel)
- **Deep Well #6 And Deep Well #7 Pump Replacement** (No photo)
- **Jordan Aqueduct Reach 4 Station 308 Gate Valve Repair** (Photo 3 - The damaged gate valve being removed from Station 308 on the Jordan Aqueduct Reach 4)
- **Retail Meter Replacement And Advanced Metering Infrastructure Upgrades** (No photo)
- **Naniloa Reservoir Improvements** (Picture 4 - Street view of the reservoir)
- **1453 East 9400 South Well And 8518 South 960 East Well Pump Replacements** (No photo).
- **Flow Control And Meter Station At 7800 South 1000 East** (No photo)
- **Jordan Aqueduct Sleeve Valves Repair** (No photo)
- **JVWTP Welby Canal Box Structure** (Picture 5 - New bridge in operation with safety railings and improved JVWTP accessibility)
- **11800 South Zone C Pump Station Upgrades** (Picture 6 - Construction in progress)
- **12.5 MG JVWTP Reservoir** (Picture 7 - Tank interior)
- **JVWTP Filter Washwater Pre-Design** (No photo)





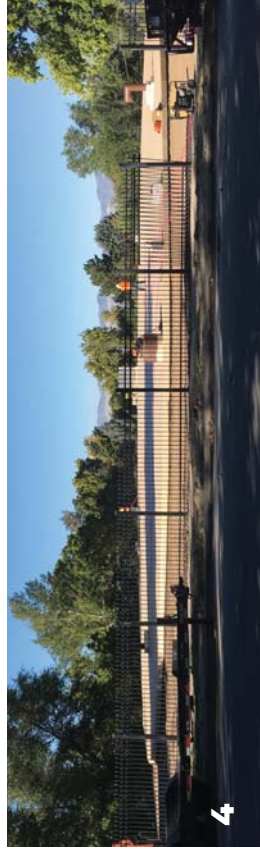
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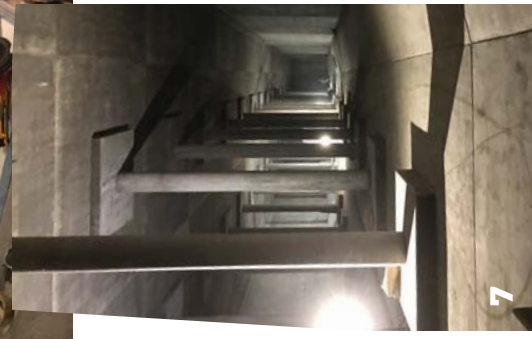
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4



7

CPS/PROPERTY

ENGINEERING

Property Acquired FY 2018/2019

Seller	Acres	Project	Total Acquisition Costs
Vicky R. Jones (Trust)	1.987	Zone D Reservoir Expansion	\$330,000

Safety Track

Jordan Valley Water Conservancy District Safety Track Summary

FY 18/19	Past Fiscal Year Totals																
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	17/18	16/17	15/16	14/15	13/14
OSHA recordable injuries	0	0	1	0	0	0	2	0	1	0	1	0	3	4	1	5	5
Vehicle crashes	0	1	1	0	1	4	2	0	1	2	0	0	11	8	9	11	9

Days since last OSHA recordable injury: **55** (5/8/19) Best record for time without an OSHA recordable injury: **285** (7/27/16 - 5/17/17)
 Days since last vehicle crash: **105** (3/18/19) Best record for time without a vehicle crash: **178** (7/19/13 - 1/12/14)

Maintenance Department Safety Track Summary

FY 18/19	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	17/18	16/17	15/16
OSHA recordable injuries	0	0	1	0	0	0	1	0	0	0	0	0	2	1	0
Vehicle crashes	0	0	1	0	1	3	2	0	0	0	0	0	6	5	6

Days since last OSHA recordable injury: **153** (1/28/19) Best record for time without an OSHA recordable injury: **720** (6/23/15 - 6/11/17)
 Days since last vehicle crash: **153** (1/28/19) Best record for time without a vehicle crash: **184** (7/20/15 - 1/19/16)

Operations Department Safety Track Summary

FY 18/19	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	17/18	16/17	15/16
OSHA recordable injuries	0	0	0	0	0	0	1	0	1	0	0	0	0	3	1
Vehicle crashes	0	1	0	0	0	1	0	0	0	0	0	0	4	3	0

Days since last OSHA recordable injury: **101** (3/22/19) Best record for time without an OSHA Recordable injury: **553** (6/27/17 - 12/31/18)
 Days since last vehicle crash: **150** (1/31/19) Best record for time without a vehicle crash: **452** (4/24/15 - 7/19/16)

Administration, Communications, Engineering, and IS Safety Track Summary

FY 18/19	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	17/18	16/17	15/16
OSHA recordable injuries	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
Vehicle crashes	0	0	0	0	0	0	0	0	1	0	0	0	1	0	3

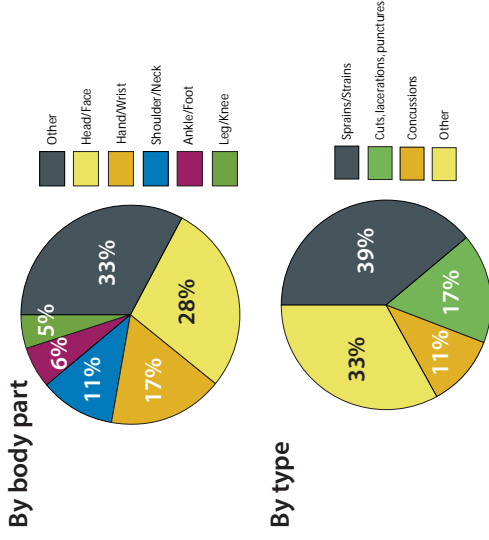
Days since last OSHA recordable injury: **55** (5/8/19) Best record for time without an OSHA recordable injury: **1554** (1/16/14 - 4/18/18)
 Days since last vehicle crash: **105** (3/18/19) Best record for time without a vehicle crash: **665** (5/10/16 - 3/5/18)

OSHA Recordable Injuries^a

OSHA Recordable Injuries 14/15-18/19

Date	Type of injury	Light duty restriction (days)	Days away from work	Total PTD (Workers Comp)	Dept
9/25/18	Allergic reaction to wasp stings	0	0	\$3,004	Maintenance
1/4/19	Elbow strain/sprain	9	0	\$418	Operations
1/28/19	Whiplash, lower back strain	7	0	\$15	Maintenance
3/22/19	Pulled hamstring, right hand avulsion	0	0	\$1,905	Operations
5/8/19	Left shin laceration	0	0	\$469	Administration
Total	5	16	0	\$5,810	

a- 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.
PTD = Paid to date.

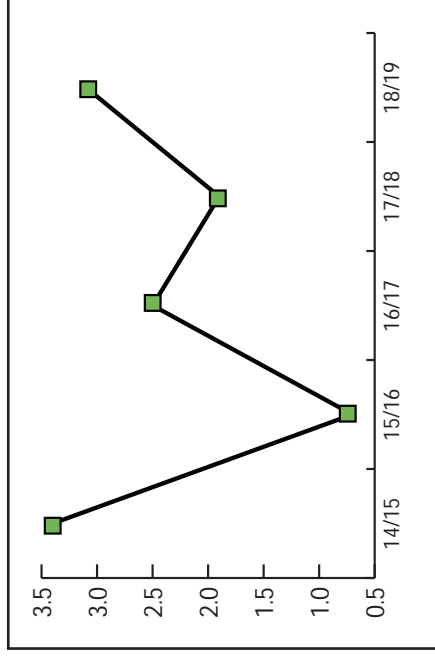


OSHA Recordable Injury Incident Rates

Fiscal Year	Avg emp hrs wrkd ^a	# of Injuries	Incident Rate ^b	Total PTD (Wkrs Comp)
2014/2015	293,000	5	3.4	\$6,943
2015/2016	293,000	1	0.7	\$171
2016/2017	316,160	4	2.5	\$3,968
2017/2018	316,160	3	1.9	\$74,010
2018/2019	322,400	5	3.1	\$5,810

a- Number of employees x 2000 (2000 hours is the average number of hours an employee works per year and is the number that OSHA recommends for calculating incident rates)

b- Total injuries x 200,000, divided by "# of employee hours worked"



OSHA Recordable Injury Incident Rates by Department

New Depts	18/19	17/18	16/17	15/16	Old Depts	14/15
Admin	1.6	1.6	0.0	0.0	Admin	0.0
Maintenance	3.8	3.9	1.9	0.0	Distribution	6.3
Operations	4.3	0.0	6.6	2.1	Treatment	6.1
					Water Supply	0.0

Performance Indicators

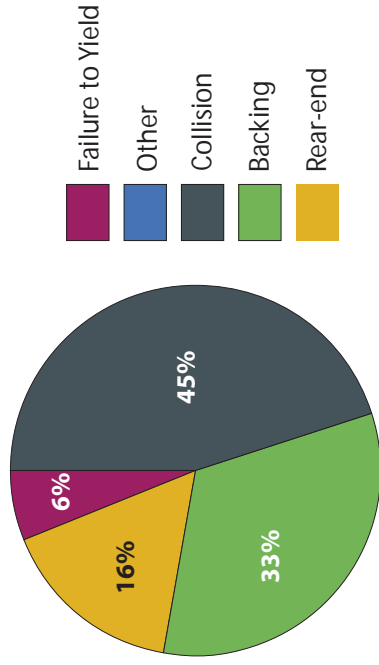


Vehicle Crashes^a

Date	District Cost	Type	Dept
8/22/2018	\$306	Backing	Operations
9/20/2018	\$0	Rear-end	Maintenance
11/16/2018	\$587	Collision	Maintenance
12/3/2018	\$604	Collision	Maintenance
12/12/2018	\$0	Rear-end	Maintenance
12/20/2018	\$24,192	Collision	Operations
12/26/2018	\$5,350	Backing	Maintenance
1/23/2019	\$264	Other	Maintenance
1/28/2019	\$0	Rear-end	Maintenance
3/18/2019	\$1,981	Backing	Information Systems
Total	\$33,284		

a- 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.

Vehicle Crash Types 14/15 - 18/19

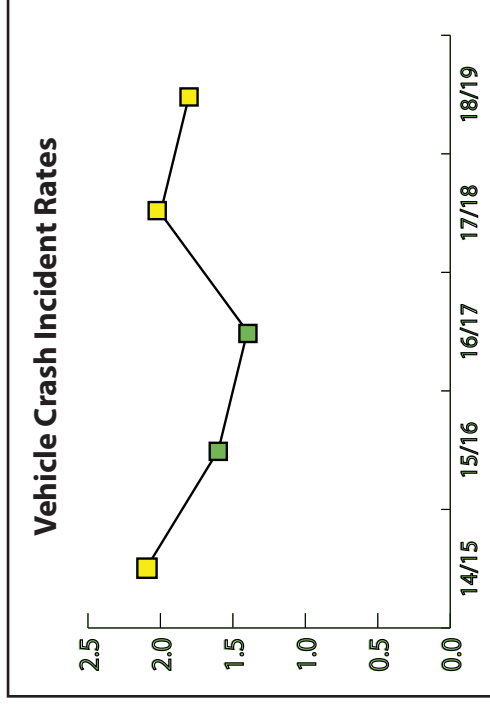


Vehicle Crash Incident Rates

Fiscal Year	# of Miles Driven	# of Crashes	Incident Rate ^a	District Cost ^b
2014/2015	530,237	11	2.1	\$3,920
2015/2016	551,402	9	1.6	\$2,920
2016/2017	554,480	8	1.4	\$7,280
2017/2018	541,208	11	2.0	\$11,222
2018/2019	555,974	10	1.8	\$33,284

a- Total crashes x 100,000, divided by "# of miles driven."

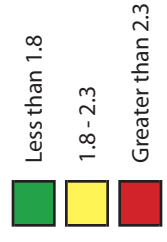
b- Total cost for all repairs and medical expenses paid by JWVCD or its insurance carriers for all parties involved.



Vehicle Crash Incident Rates by Department

New Depts	18/19	17/18	16/17	15/16	Old Depts	14/15
Admin	1.7	1.7	0.0	3.1	Admin	2.9
Maintenance	2.2	1.8	1.6	2.2	Distribution	2.1
Operations	1.2	2.3	1.7	0.0	Treatment	1.1
					Water Supply	0.0

Performance Indicators



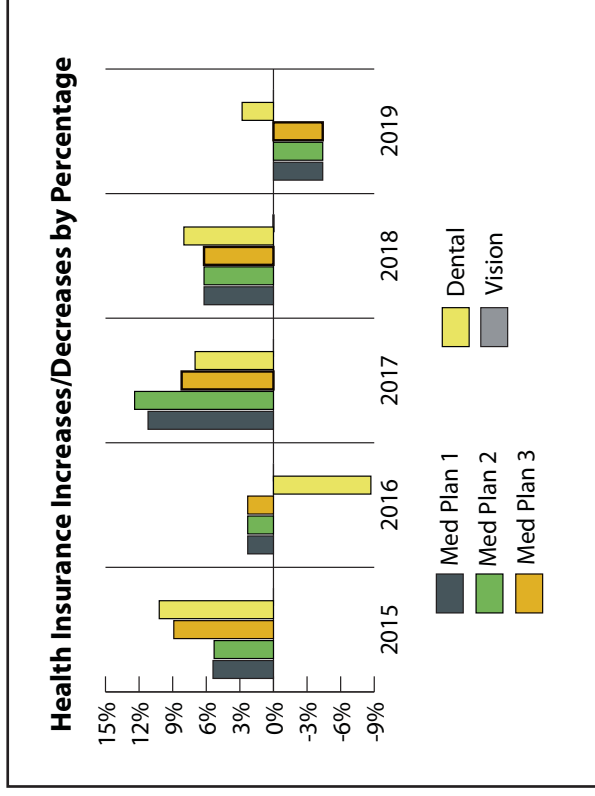
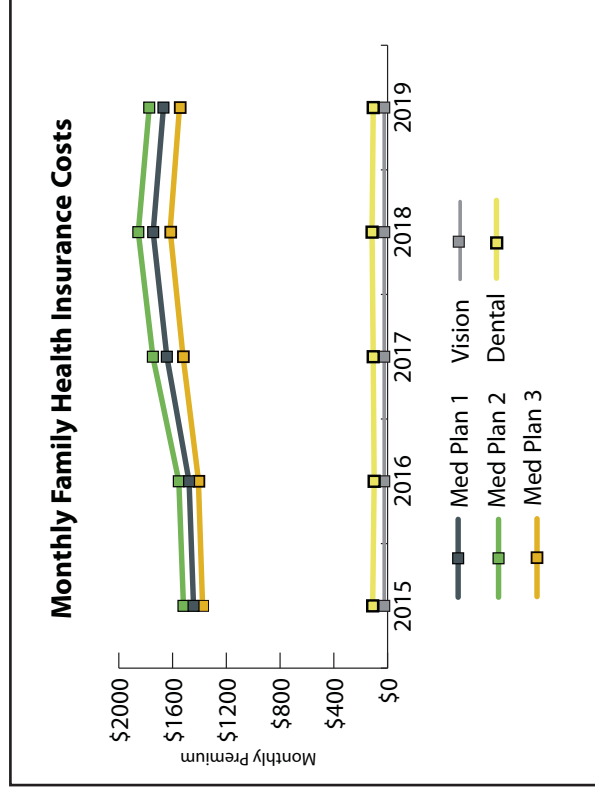
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Personnel - Employee History

	Calendar Year 2019	Calendar Year 2018	Calendar Year 2017	Calendar Year 2016	Calendar Year 2015
Full-time authorized positions:	147	147	146	144	141
Part-time positions:	1	1	1	1	2
New positions authorized:	0	0	1	2	2
			System Operator	Inspector/Locator I Pipeline Maintenance Lead	• Conservation Programs Coordinator • Receptionist, Ed. Center (Seasonal to FT)
Turnover - # of Terminations	not yet available	3	5	2	4
Retirements	not yet available	6	2	2	7
Turnover rate:	not yet available	6.08%	4.7%	2.7%	7.6%
Employees per 1,000 AF of water delivered:		1.08	1.03	1.03	1.05
AF delivered per employee:		929	972	973	951*

*Number has been updated to reflect more accurate data.

Personnel - History of Insurance Costs



Personnel Costs

HUMAN RESOURCES

ADMIN

History of Salary Increases (effective date JULY 1)		2019	2018	2017	2016	2015	2014
Merit increase		3.2%	3.2%	3.0%	3.0%	3.0%	3.0%
Merit/step average		4.45%	4.43%	4.05%	6.05%	4.02%	4.01%
- merit range		0% to 9.14%	0% to 7.10%	0% to 19.23%*	5.00% to 6.86%	3.65% to 7.10%	2.0% to 8.09%
Personnel Budget		2019/2020	2018/2019	2017/2018	2016/2017	2015/2016	2014/2015
Salary & benefits		\$16,536,173	\$16,591,406	\$16,209,198	\$15,490,889	\$14,645,088	\$14,158,927
Increase over previous year		-0.3%	2.36%	4.43%	5.78%	3.43%	4.86%
Health Insurance Plan & Costs: (see charts next page)		Calendar 2019	Calendar 2018	Calendar 2017	Calendar 2016	Calendar 2015	Calendar 2014
Medical Plan 1 (monthly premium)		SelectMed+HDHP	SelectMed+HDHP	SelectMed+HDHP	SelectMed+HDHP	SelectMed+HDHP	SelectMed+HDHP
- Single		\$565.40	\$591.30	\$556.80	\$500.80	\$489.50	\$464.40
- 2-party		\$1,215.90	\$1,271.60	\$1,197.40	\$1,076.90	\$1,052.70	\$998.60
- Family		\$1,668.00	\$1,744.40	\$1,642.60	\$1,477.30	\$1,444.10	\$1,369.90
Increase over previous year		-4.4%	6.2%	11.2%	2.3%	5.4%	12.70%
Medical Plan 2 (monthly premium)		SelectCare+HDHP	SelectCare+HDHP	SelectCare+HDHP	SelectCare+HDHP	SelectCare+HDHP	SelectCare+HDHP
- Single		\$601.40	\$628.90	\$592.20	\$526.70	\$514.90	\$488.90
- 2-party		\$1,293.20	\$1,352.40	\$1,273.40	\$1,132.50	\$1,107.00	\$1,051.20
- Family		\$1,773.80	\$1,855.00	\$1,746.70	\$1,553.50	\$1,518.60	\$1,442.00
Increase over previous year		-4.4%	6.2%	12.4%	2.3%	5.3%	12.7%
Medical Plan 3 (monthly prem.)		SelectValue+HDHP	SelectValue+HDHP	SelectValue+HDHP	SelectValue+HDHP	SelectValue+HDHP	SelectValue+HDHP
- Single		\$523.10	\$547.00	\$515.00	\$476.00	\$465.30	\$427.20
- 2-party		\$1,124.70	\$1,176.20	\$1,107.50	\$1,023.40	\$1,000.40	\$918.60
- Family		\$1,543.10	\$1,613.70	\$1,519.50	\$1,404.10	\$1,372.50	\$1,260.20
Increase over previous year		-4.4%	6.2%	8.2%	2.3%	8.9%	N/A
Dental Plan (monthly premium)		CIGNA	MetLife	MetLife	MetLife	Aetna	Aetna
- Single		\$29.62	\$28.81	\$26.68	\$24.93	\$32.54	\$29.53
- 2-party		\$56.18	\$60.71	\$56.21	\$52.53	\$69.27	\$62.86
- Family		\$106.84	\$115.45	\$106.90	\$99.91	\$111.12	\$100.84
Increase over previous year		3.0%	8.0%	7.0%	-8.7%	10.2%	2.6%
Vision Plan (monthly premium)		Self Insured	Self Insured	Self Insured	Self Insured	Self Insured	Self Insured
- Single		\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50
- 2-party		\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00
- Family		\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00
Increase over previous year		0.00%	0.00%	0.00%	0.00%	0.00%	20.0%

*Includes implementation of updated compensation plan.

Budget Review

<u>Sources of funds</u>	2018/2019 Budget	Preliminary Actual* as of 6/30/2019	% FYTD
Wholesale water sales	\$45,250,000	\$43,737,607	97%
Retail water sales	6,948,900	7,301,983	105%
Tax revenue	19,203,750	20,015,057	104%
Interest income	1,368,900	2,031,290	148%
Misc. operating & non-operating revenue	270,300	1,459,468	91%
Connection/development fees	249,500	494,319	183%
Capital projects fund (gross)	48,180,447	39,866,769	83%
Total sources	\$122,822,297	\$114,906,493	94%

Uses of funds

Water purchases	\$14,642,762	\$13,850,550	95%
Operation & maintenance expenses	9,251,173	8,218,868	89%
General & administrative expenses	4,239,724	3,436,783	81%
Personnel expenses	16,646,126	15,796,002	95%
Capital projects fund (gross)	48,180,447	39,866,769	83%
Total uses	\$92,960,232	\$81,168,972	87%

Net operating revenues	\$29,862,065	\$33,737,521	113%
Debt service payments	(21,476,393)	(20,987,358)	98%
Debt service coverage ratio	1.39	1.61	

Amount available to transfer to reserves

Total from operations

*Preliminary numbers pending audit.

\$8,385,672	\$12,750,163	152%
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