

# OLYMPIC VALLEY PUBLIC SERVICE DISTRICT



### WATER AND SEWER SYSTEM ANNUAL REPORT

- **DATE**: April 29, 2025
- TO: District Board Members
- **FROM**: Sam Donahue, Operations Superintendent
- **SUBJECT**: Water and Sewer System Annual Report Information Only
- **BACKGROUND:** The discussion section below provides information from the Operations Department regarding operations and activities that are not the subject of a separate report.
- **DISCUSSION**: This report is a summary of the Operations Department's activities during the 2024 calendar year. The report covers notable crew accomplishments and administrative work, water and sewer inventories, graphs representing trends on aquifer levels, water production, sewer collection, vehicle maintenance, and fuel usage.

**ALTERNATIVES**: This report is for information only.

#### FISCAL/RESOURCE IMPACTS: None

**RECOMMENDATION**: This report is for information only.

#### ATTACHMENTS:

- 2024 Water and Sewer System Annual Report
- Slideshow Presentation

DATE PREPARED: April 21, 2025



# OLYMPIC VALLEY PUBLIC SERVICE DISTRICT



# **2024 WATER & SEWER SYSTEM REPORT**

Prepared April 2025 By Sam Donahue and John Tuscher

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# **OVPSD Utilities Report 2024**

#### **Annual Summary**

This past year has been one of continued progress and productivity for our dedicated water and sewer operations crew. Despite being a small team, we aided contractors in meeting AWWA drinking standards and meeting district sewer code on several major infrastructure projects achieving critical system upgrades that have significantly improved service reliability for our community.

Our team successfully replaced over 324 water meters, giving the customer more information on their water usage and helping the District advance its water conservation goals. We also collected 56 state-required water samples to ensure we are fully compliant. All crew members attended conferences or online trainings to ensure continuing education credits. In addition, we assisted 11 customers with leak notifications and guided them on how to locate and resolve their leaks. Finally, we repaired three water service lines.

In addition to infrastructure improvements, we enhanced our preventive maintenance program by conducting thorough inspections and cleanings of over 50% of the sewer system's lines and manholes - contributing to our achievement of zero Sanitary Sewer Overflows (SSO). This proactive approach has always, and continues to be, the crew's driving mission to reduce emergency repair calls and improve overall operational efficiency.

Most importantly, our crew has continued to provide outstanding customer service. Despite the departure of our Operations Manager, Brandon Burks, we were fortunate to welcome a valuable new team member, Miguel Ramirez. We have maintained our responsiveness to service requests and emergencies with professionalism and speed.

Thanks to the crew's hard work and commitment, we continue to provide clean water and safe sanitation for the entire community. We're proud of what we've accomplished together in 2024 and look forward to building on this momentum in the year ahead.

Respectfully,

Sam Donahue Operations Superintendent

### **Flow Report**

#### Water Production

- Total = 100.95 MG
- Comparison: +2.6 MG compared to 2023

#### Sewer Collection

- Total Collected: 79.16 MG
- Comparison: -18 MG compared to 2023 Aquifer Level
- 2024 Maximum Level: 6190.4' (May 20, 2024)
- 2024 Minimum Level: 6181.0' (November 20, 2024)
- 2023 Static Water Level Change: 5.4'
- 2024 Static Water Level Change: 9.4'

#### **Precipitation Total**

- 2023/24 Water Year Total: 49.13"
- 60-Year average: 53.49"
- Percent of Average: 91.84%



#### Notes:

- \*\* Lowest recorded aquifer level: 6,174.0 feet (October 12, 2001).
- \*\*\* Creek bed elevation near Well 2r: 6,186.9 feet. (West Yost Associates)
- \*\*\*\* Precipitation total measured from October 2023 September 2024.
- \*\*\*\*\* Historical precipitation data (1994-2004) may have inaccuracies
- \*\*\*\*\*\*Water production totals may differ from SCADA due to time of day reading variations.

### Leaks, Repairs, and Maintenance

#### Water

- Water meters replaced/installed: 324
- Water meter upgrades: 3
- Customer service water meters turned on/off: 13
- Leak/high usage notification: 66
- Customer leak detection services: 11
- No water responses: 5
- Fire hydrants flushed: 165
- Blow-offs flushed: 20
- Valves exercised: 120
- Service line repair/replace: 3
- Water main leaks: 0
- Backflow devices tested: 566
- District backflow tests: 4
- Quarterly vault inspections (Well 1R and Well 3): 8
- Water tank inspections: 8
- Water quality complaints: 2
- Commercial meters tested: 0
- Air/Vac breakers replaced: 1
- Water samples collected:
  - o Bacteriological: 39
  - Primary Standards: 2
  - Secondary Standards: 1
  - Nitrite/Nitrate: 2
  - VOC: 1
  - Cyanide: 1
  - Asbestos: 5
  - Inorganic: 3
  - Lead/Copper: 1
  - o Gross Alpha: 3



- o Uranium: 2
- Radium: 1
- 1,2,3-Trichloropropane: 3
- Hex chromium: 1
- SOC: 4
- Nitrate/Nitrite: 2
- o Dinoseb: 3
- Lead/Copper: 11
- o Perchlorate: 5

#### Sewer

- Sanitary sewer overflows: 0
- Main line repairs: 0
- Service line repairs: 0
- Sewer cleanout repairs: 2
- Manhole repairs: 5
- Manhole grouting: 0
- Quarterly vault inspections (HWY 89): 4
- Cleaning Activities:
- Spring and fall high priority lines flushing
- Main sewer lines cleaned: 281

#### Inspections

- Underground Service Alerts: 104
- Pre-remodel inspections: 0
- Final Inspections: 3
- Fixture count inspections: 2
- Water service line inspections: 1
- Sewer service line inspections: 3
- Sewer service line pressure test: 18
- Sewer main line inspections: 0
- Water quality complaint investigations: 0
- Water Backflow Inspections: 4
- Fog Inspections: 0
- Second Unit Inspection: 1



#### **Operation & Maintenance Projects**

- Vegetation removed along tank access roads
- Gate valve box repairs
- Sewer system I/I inspections
- Manhole paving repairs
- Manhole casting replacements
- Spring and fall flushing
- Annual and high priority sewer cleaning
- Hydrant bollard and fire hydrant repairs
- Tank inspections
- Sewer C/O locating
- Meter box replacements
- Green waste cleanup
- Meter and cellular endpoint replacement project
- Well 3 rehabilitation, treatment, and flushing
- Well 5 roof repairs
- East Booster pipe replacement, backup pump purchased



## Building and Grounds Maintenance and Repair

#### 305 Olympic Valley Rd Fire Department and Administration

- Ongoing monthly service and maintenance of facility, equipment and HVAC system
- Replaced one of two heating loop circulation pumps
- Repaired heating loop piping in boiler room
- Backflow repair
- Roof repair
- Boiler pump replacement
- Domestic hot water leak repairs
- Toilet repairs
- Kitchen faucet and drain repair

#### 1810 Olympic Valley Rd District Equipment Garage

- Ongoing monthly service and maintenance of facility and equipment
- Bay 1 garage door motor replacement
- Toilet repair

#### **Vehicles and Equipment**

#### Vehicles

• All vehicles serviced annually, with the exception of the Ford Interceptor and Ford F-150, which received biannual services.

#### Equipment

• All small equipment received annual service.

#### Administrative

- VUE Works data input
- Sewer monthly/annual reports
- CCRs preparation
- CARB reporting
- eAR
- SAFER Clearinghouse submissions

# Year End Charts & Graphs

## Water System Inventory – 2024

#### **Updated Information to Match District GIS Database**

- 1. Water Well #1R 380 GPM average \*
- 2. Water Well #2R 330 GPM average \*, \*\*
- 3. Water Well #3 110 GPM average \*
- 4. Water Well #4 (Not in Service)
- 5. Water Well #5R 390 GPM average \*
- 6. Horizontal Well (Out of Service) \*\*\*
- 7. West Tank 1,150,000 Gallon Water Tank
- 8. East Tank 500,000 Gallon Water Tank
- 9. Zone 3 Tank 135,000 Gallon Water Tank

#### Total Storage – 1,785,000 Gallons

- 10. 2 Booster Pumping Stations
- 11. 901 Water Meters connected
- 12. 132 Fire Hydrants
- 13. 24 Air Release Valves
- 14. 566 Backflow Prevention Devices
- 15. 419 Gate Valves

Notes:

\* GPM averaged from the time wells were on and running.

\*\* Well 2R GPM is affected by seasonal aquifer level changes. During low aquiver level years, the well GPM is reduced to prevent pumping below the well screens.

\*\*\* Horizontal Well is out of service. When it runs GPM is affected by gravity flow and changes from one year to the next. Longer periods of operation will lower the GPM. The average in 2016 was 70 GPM.

#### Continued, Water System Inventory - 2024

- 16. 10 Butterfly Valves
- 17. 27 Blow Off Assemblies
- 18. 6 Control Valves (Granite Chief, East Booster, Zone 3 Booster, Hz Well, Well 5)
- 19. 3 Transducer Stations (West Tank, East Tank, and Zone Three Tank)
- 20. 7 Remote Terminal Units (RTU), SCADA Telemetry System
- 21. 16,358 Feet 12" Water Distribution Main
- 22. 10,514 Feet 10" Water Distribution Main
- 23. 28,960 Feet 8" Water Distribution Main
- 24. 26,927 Feet 6" Water Distribution Main
- 25. 726 Feet 4" Water Distribution Main
- 26. 505 Feet 2" Water Distribution Main
- 27. 30 Feet 8" Water Service Line
- 28. 87 Feet 6" Water Service Line
- 29. 20 Feet 4" Water Service Line
- 30. 143 Feet 3" Water Service Line
- 31. 2,847 Feet 2" Water Service Line
- 32. 291 Feet 1.5" Water Service Line
- 33. 3,109 Feet 1" Water Service Line
- 34. 11,518 Feet <sup>3</sup>/<sub>4</sub>" or smaller Water Service Line

Total Water Main= 84,014 Feet= 15.91 MilesTotal Water Services= 18,047 Feet= 3.42 MilesCombined Total= 102,061 Feet= 19.33 Miles

### Year End Water Audit Report 2024

Year:	2024	Report Date: _	April 10, 2025	Performed By:	Sam Donahue
	Begin Audit Period: End Audit Period:				
Т	otal Metered Consum	ption for audit period s	specified (including	hydrant meters):	83,656,549
	Unread Mete Total Unmetered	Additional Consumpt re Department Use: Hydrant Flushing: Blow-Off Flushing: Sewer Cleaning: Street Cleaning: Well Flushing: Tank Overflows: er Estimated Reads: Other: Consumption (for aud	<u>130,000</u> <u>1,120,332</u> <u>15,000</u> <u>173,000</u> it period specified):	1,438,332	
		Estimated Unknown L	oss - Unmetered		
Total	Estimated leaks that I	Known Theft: Illegal Connections: have been repaired: d Unmetered (for aud	it period specified):		

Total Production for audit period specified: 101,136,399

Total Metered/Unmetered Consumption for audit period specified: 85,094,881

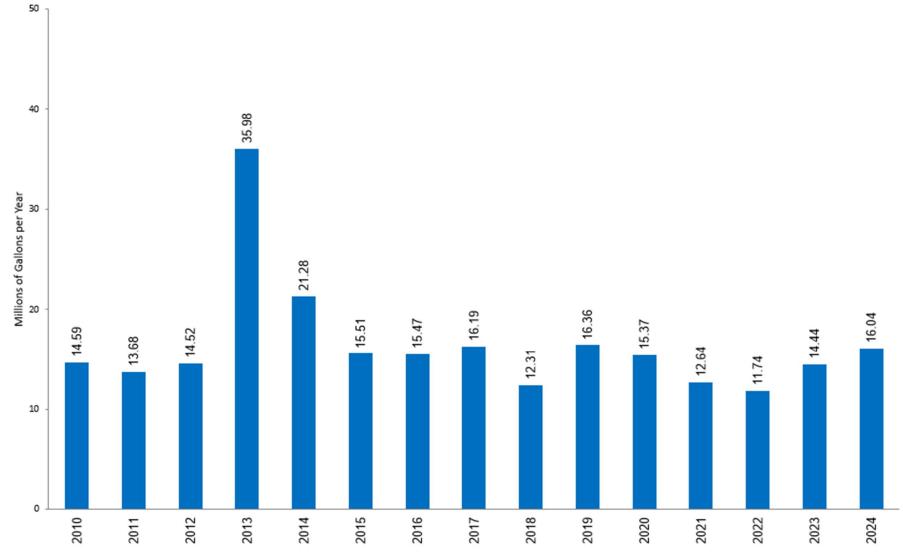
Total Water Loss (Production - Consumption): 16,041,518 Loss Percentage: 15.9% \*\*\*

#### Comments:

\* Instructions - Only fill in the blue cells \*

\*\*\* Note - Total Water Loss Percentage inclued theft, Illegal Connections or Leaks that have been repaired

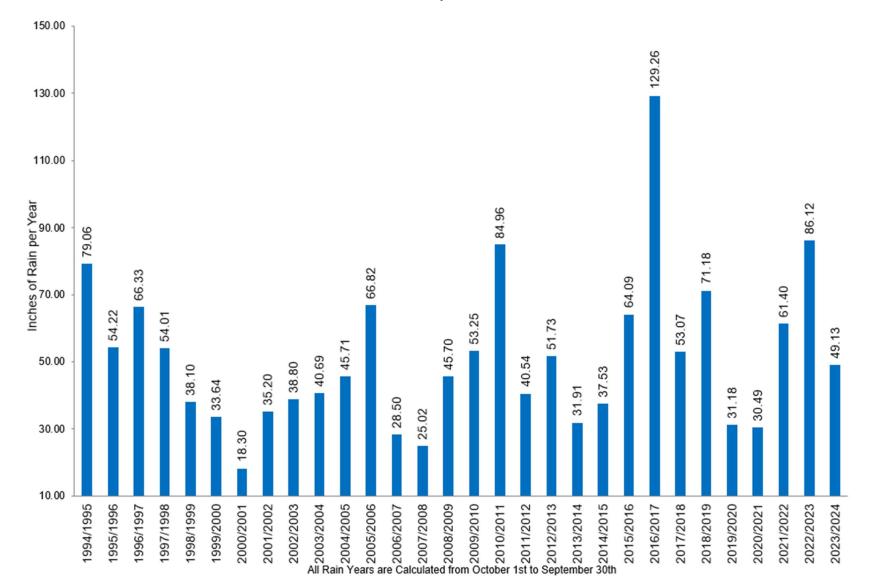
<sup>\*</sup> Note - All Production & Consumption Totals In U.S. Gallons \*



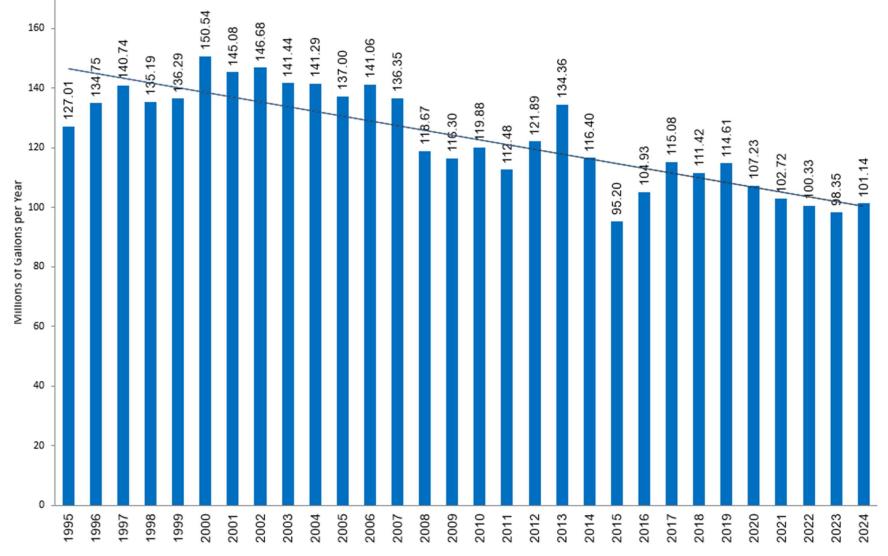
## 15 Year Water Loss Trend

Information comes from from Year End Water Audit Report

30 Year Precipitation Trend

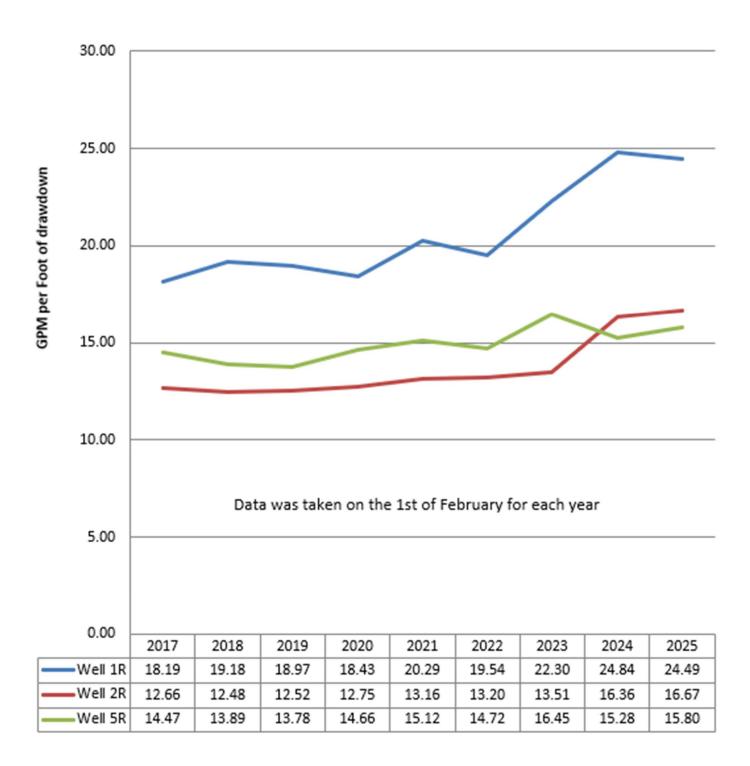


### 30 Year Water Production Trend

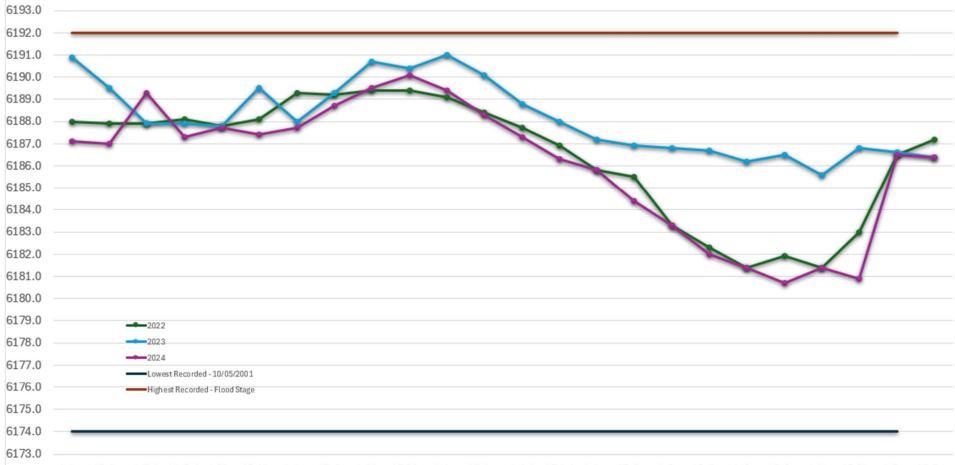


Information comes from from well logs

### Production Wells Specific Capacity

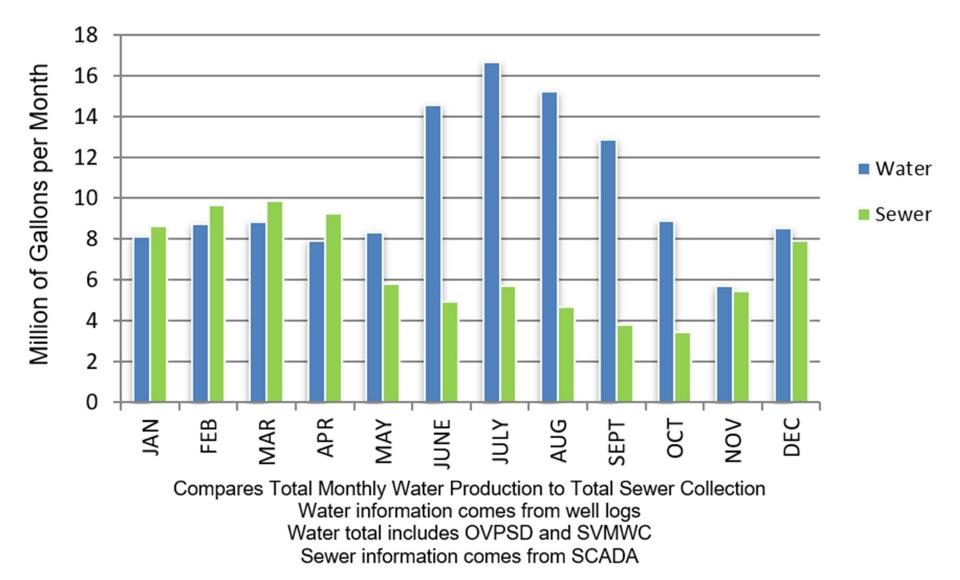


## Aquifer Levels 3 Year Trend



1-Jan 15-Jan 1-Feb 14-Feb 1-Mar 15-Mar 1-Apr 15-Apr 1-May 15-May 1-Jun 15-Jun 1-Jul 15-Jul 1-Aug 15-Aug 1-Sep 15-Sep 1-Oct 15-Oct 1-Nov 15-Nov 1-Dec 15-Dec

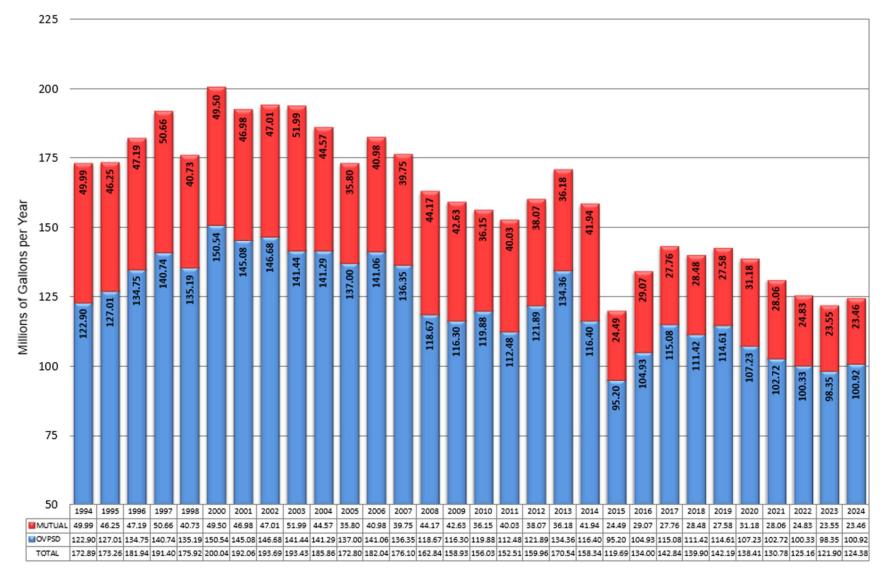
Water & Sewer Comparison-Graph



	WATER	WATER	WATER	SEWER	
	OVPSD	OVMWC	TOTAL	TOTAL	
JAN	6.88	1.21	8.09	<mark>8.6</mark> 1	
FEB	7.23	1.50	8.73	9.67	
MAR	7.31	1.54	8. <mark>8</mark> 5	9.86	
APR	6.65	1.26	7.91	9.23	
MAY	6.44	1.88	8.32	5.81	
JUNE	11.55	3.00	14.55	4.95	
JULY	13.31	3.36	16.67	5.68	
AUG	12.43	2.80	15.23	4.70	
SEPT	10.55	2.35	12.90	3.79	
OCT	7.46	1.44	8.90	3.47	
NOV	4.41	1.31	5.72	5.47	
DEC	6.70	1.81	8.51	7.92	
	100.92	23.46	124.38	79.16	Million Gallons
Water information comes from well logs					
Sewer information comes from SCADA HWY 89 Flowmeter					

# Water & Sewer Comparison-Data

### 30 Year Combined Water Production Trend



Information comes from from well logs

## Sewer System Inventory – 2024

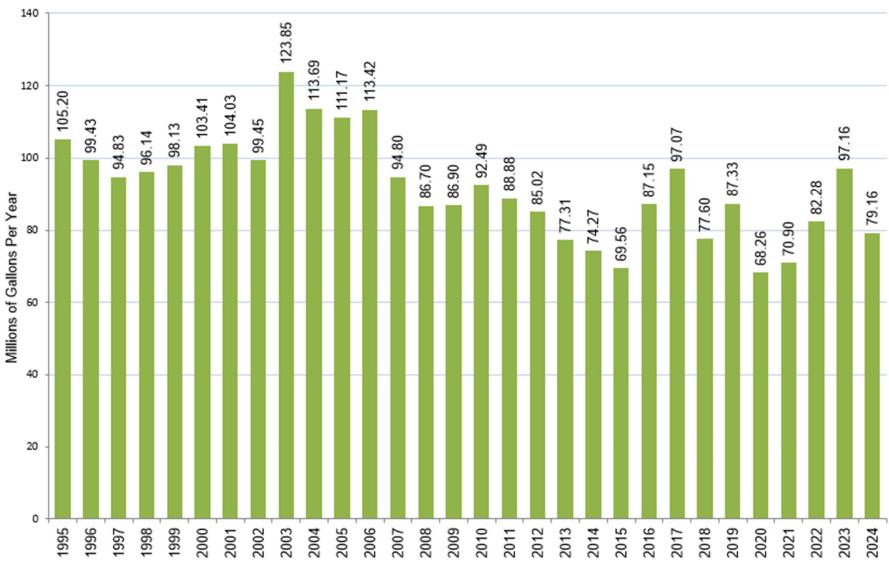
Updated Information to Match District GIS Database

- 440 Sanitary Manholes
- 3 Siphons (6",12",16")
- 3 Sewer Flow Meters
  - Mag Meter, Painted Rock Siphon T-45A District owned
  - Mag Meter, Mountain Run Ski Corp owned
  - Mag Meter, HWY 89 T-TSA owned
- 9 Feet 18" Sewer Main
- 11,170 Feet 15" Sewer Main
- 2,406 Feet 12" Sewer Main
- 9,012 Feet 10" Sewer Main
- 16,771 Feet 8" Sewer Main
- 49,061 Feet 6" Sewer Main
- 6,933 Feet 4" Sewer Main
- 19,658 Feet 4" District Sewer Lateral
- 668 Feet 6" District Sewer Lateral
- 1,054 Sewer Connections per Billing
- 2 Remote Terminal Units (RTU)

Total Sewer Main Total District Sewer Laterals Combined Totals

= 95,362 Feet (18.06 Miles) = 20,326 Feet (3.85 Miles) = 115,689 Feet (21.91 Miles)





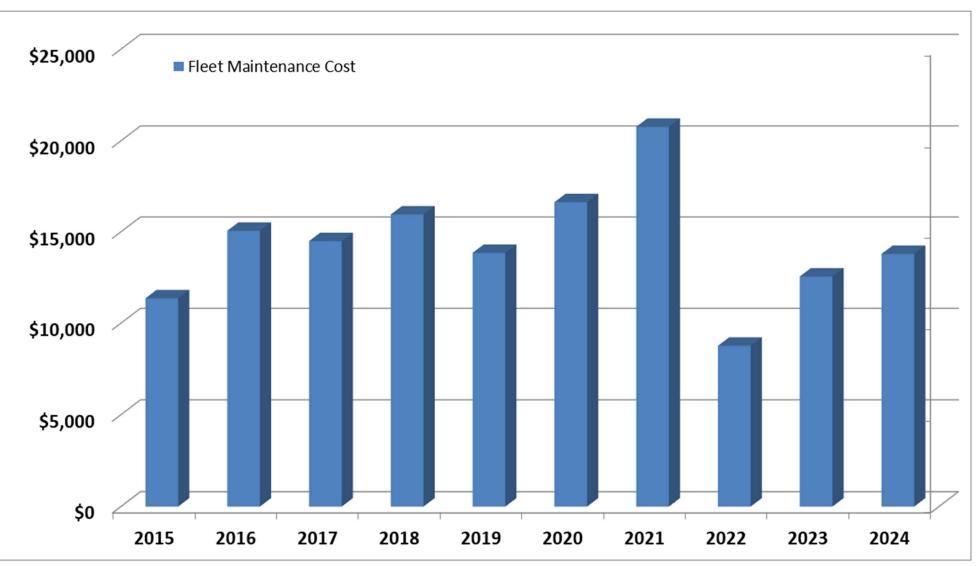
### 30 Year Sewer Flow Trend

Information from SCADA

# Annual Report on District Fleet

	2024								
Vehicle/Equipment	Mileage/Hours	Age	Replacement Schedule	Service Life		Maintenance Due	2024		
2008 Ford 1 Ton 4x4 Flat	52,957	17	15	-2		Annual Service	\$300		
						Front end, alignment	\$1,800		
2022 Dam 2500 Utility	4.093	1	15	14		Annual Service	\$300		
2022 Ram 2500 Utility	4,095		15	14		Tires	\$1,600		
							31,000		
2014 Dodge Ram 4x4	68,445	11	15	4		Annual Service	\$300		
						Axle seal service	\$680		
1007 Ford Explorer	120.280	20	15	12	Surplused in first quarter 2025	Annual Samian	6200		
1997 Ford Explorer	130,289	28	15	-13	Surplused in first quarter 2025	Annual Service	\$300		
2014 F-150 4x4	222,707	11	15	4		2x Annual Service	\$300		
2008 F-750 Dump Truck	11,940	17	30	13		Annual Service	\$300		
1998 JD 444H Loader	4,309 hr	27	30	3		Annual Service	\$300		
1990 JD 444H L080er	4,309 hr	21	30	3		Batteries	\$300		
						Hydraulic service	\$1,200		
						Hydraulic service	31,200		
JD Backhoe	1,094 hr	7	30	23		Annual Service	\$300		
2020 Isuzu I/R	22 hr	4	20	16		Annual Service	\$300		
Compressor									
2007 NewHolland	707 hr	18	30	12		Annual Service	\$300		
2007 NewHolland	707 hr	10	50	12		Annual Service	3300		
2009 Vac-Con Hydro-Vac	10,684	16	30	14		Annual Service	\$350		
						Pum p rebuild	\$1,500		
PowerTake Off (PTO)	328 hr	16	30	14					
2009 Duetz Rear Engine	1,267 hr	16	30	14		Annual Service	\$300		
2016 Ford Interceptor	37,221	9	15	6		2x Annual Service	\$300		
2016 Ford Interceptor	51,221	3	15	0		2X Allitual Service	3300		
6" Trash Pump (2020)	15.2	4	30	26		Annual Service	\$300		
2010 Prowler Easement	259.3 hr	13	20	7		Annual Service	\$300		
-									
Well House Generator	304.3	32	40	8		Annual Service	\$300		
(1993)									
1810 Generator (1991)	878.8	34	40	6		Annual Service	\$300		
	0.0.0			Ť					
305 Generator (2004)	239.4	21	40	19		Annual Service	\$300		
						Equipment	\$850		
						Rags, Cleaning Supp. Ect.	\$411		
Total	Fleet Ave. Age	15.8947					\$13,791		

## Vehicle Maintenance Cost Trend



### **Operation Department 10 Year Fuel Usage Trend**

