



# OLYMPIC VALLEY PUBLIC SERVICE DISTRICT



## 2024 WATER & SEWER SYSTEM REPORT

Prepared April 2025

By

Sam Donahue and John Tuscher

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# OVPD 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:
  - Bacteriological: 39
  - Primary Standards: 2
  - Secondary Standards: 1
  - Nitrite/Nitrate: 2
  - VOC: 1
  - Cyanide: 1
  - Asbestos: 5
  - Inorganic: 3
  - Lead/Copper: 1
  - Gross Alpha: 3
  - Uranium: 2
  - Radium: 1
  - 1,2,3-Trichloropropane: 3
  - Hex chromium: 1
  - SOC: 4
  - Nitrate/Nitrite: 2
  - Dinoseb: 3
  - Lead/Copper: 11
  - Perchlorate: 5



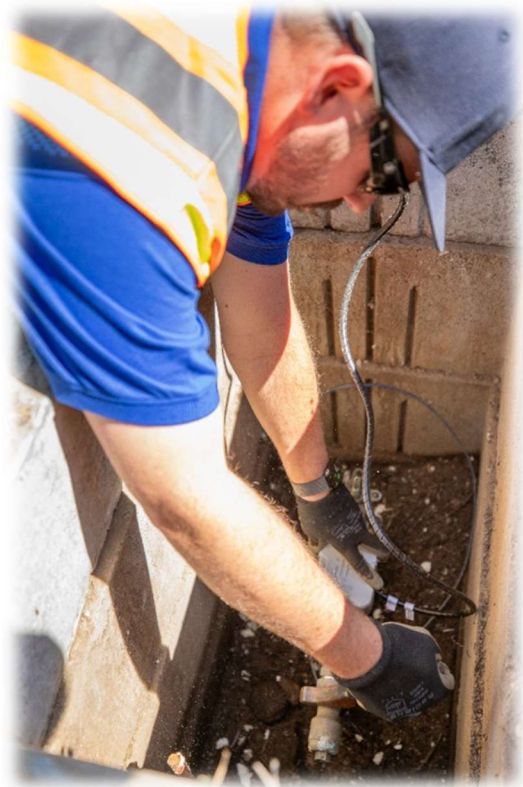


## Sewer

- 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 aquifer 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  $\frac{3}{4}$ " or smaller Water Service Line

Total Water Main = 84,014 Feet = 15.91 Miles  
Total Water Services = 18,047 Feet = 3.42 Miles  
Combined 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: 1/2/24 12:00 AM  
End Audit Period: 1/3/25 12:00 AM

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Total Metered Consumption for audit period specified (including hydrant meters): 83,656,549

Additional Consumption - Unmetered

Fire Department Use: 130,000  
Hydrant Flushing: 1,120,332  
Blow-Off Flushing: 15,000  
Sewer Cleaning: 173,000

Street Cleaning:

Well Flushing:

Tank Overflows:

Unread Meter Estimated Reads:

Other:

Total Unmetered Consumption (for audit period specified): 1,438,332

Estimated Unknown Loss - Unmetered

Known Theft:

Known Illegal Connections:

Total Estimated leaks that have been repaired:

Total Estimated Unmetered (for audit period specified):

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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% \*\*\*

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Comments:

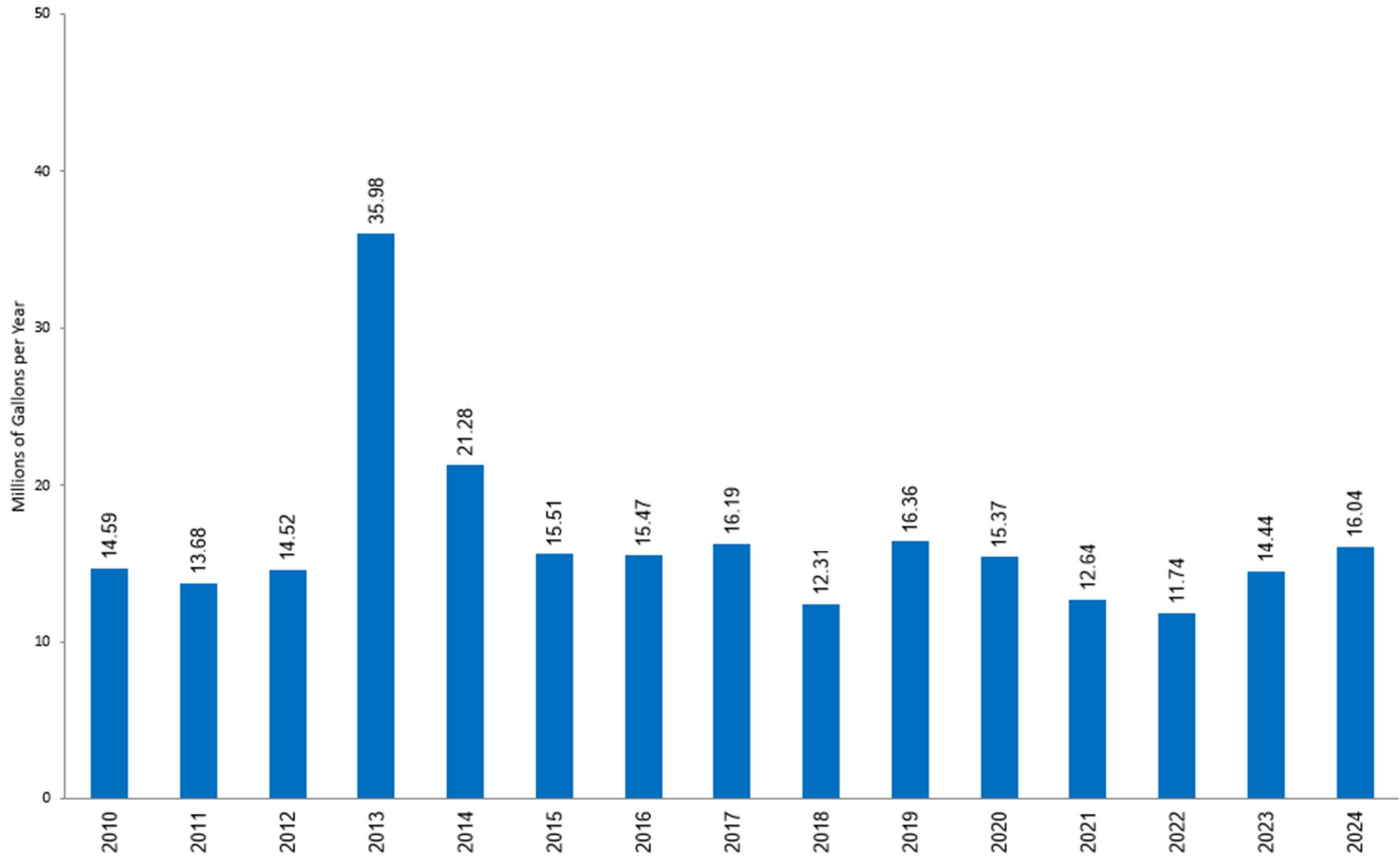
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\* Instructions - Only fill in the blue cells \*

\* Note - All Production & Consumption Totals In U.S. Gallons \*

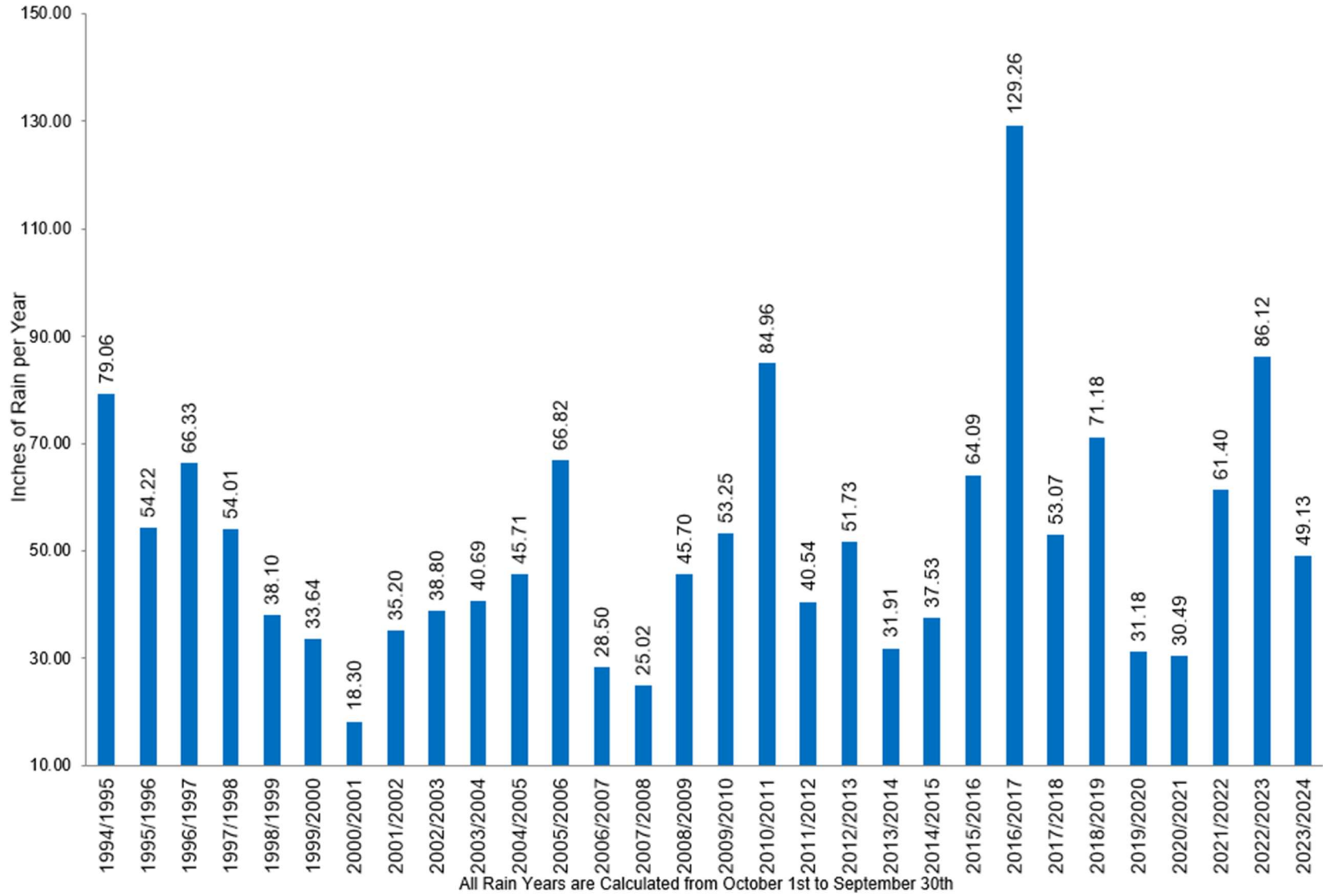
\*\*\* Note - Total Water Loss Percentage included theft, Illegal Connections or Leaks that have been repaired

## 15 Year Water Loss Trend



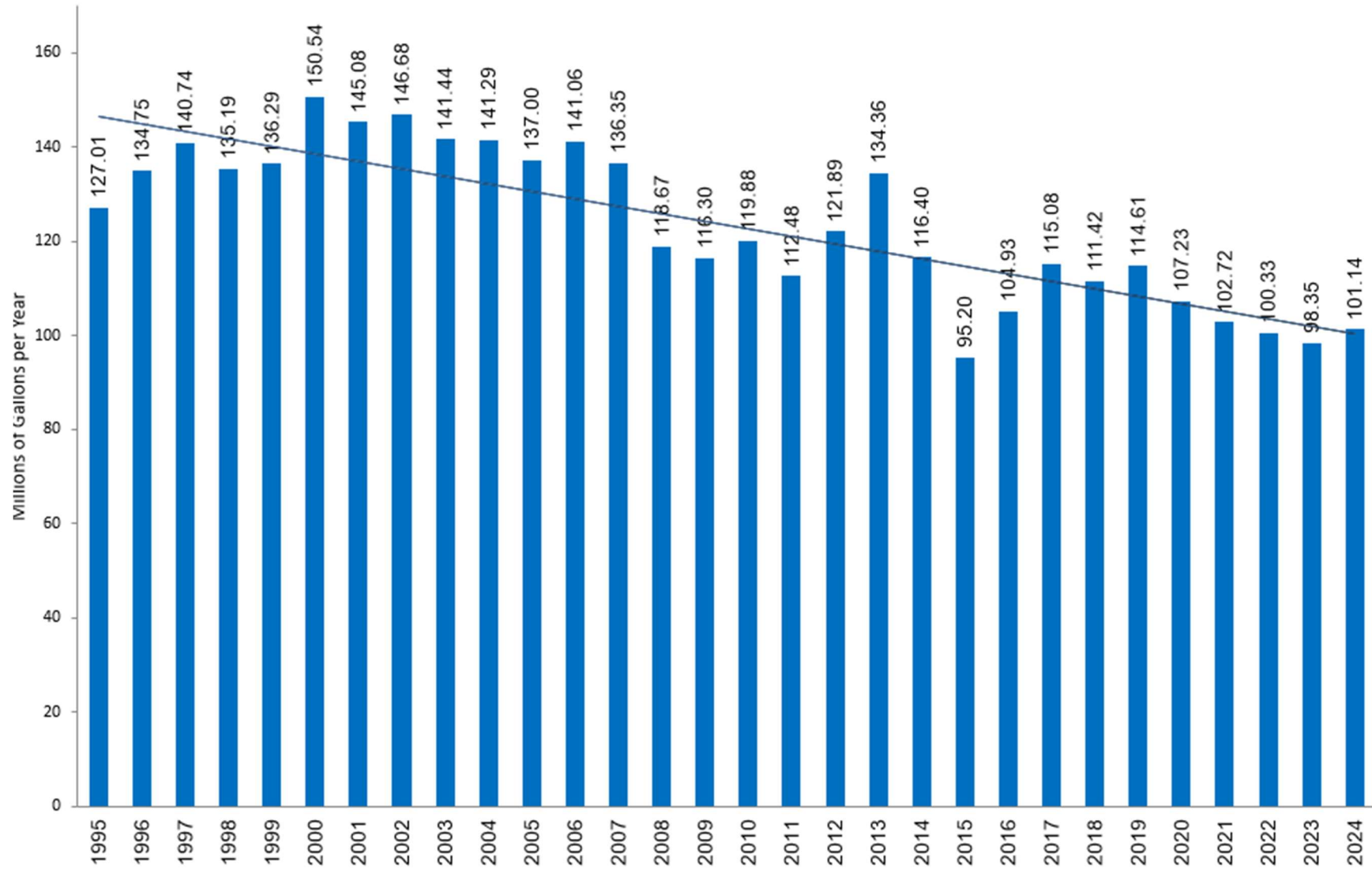
Information comes from from Year End Water Audit Report

## 30 Year Precipitation Trend



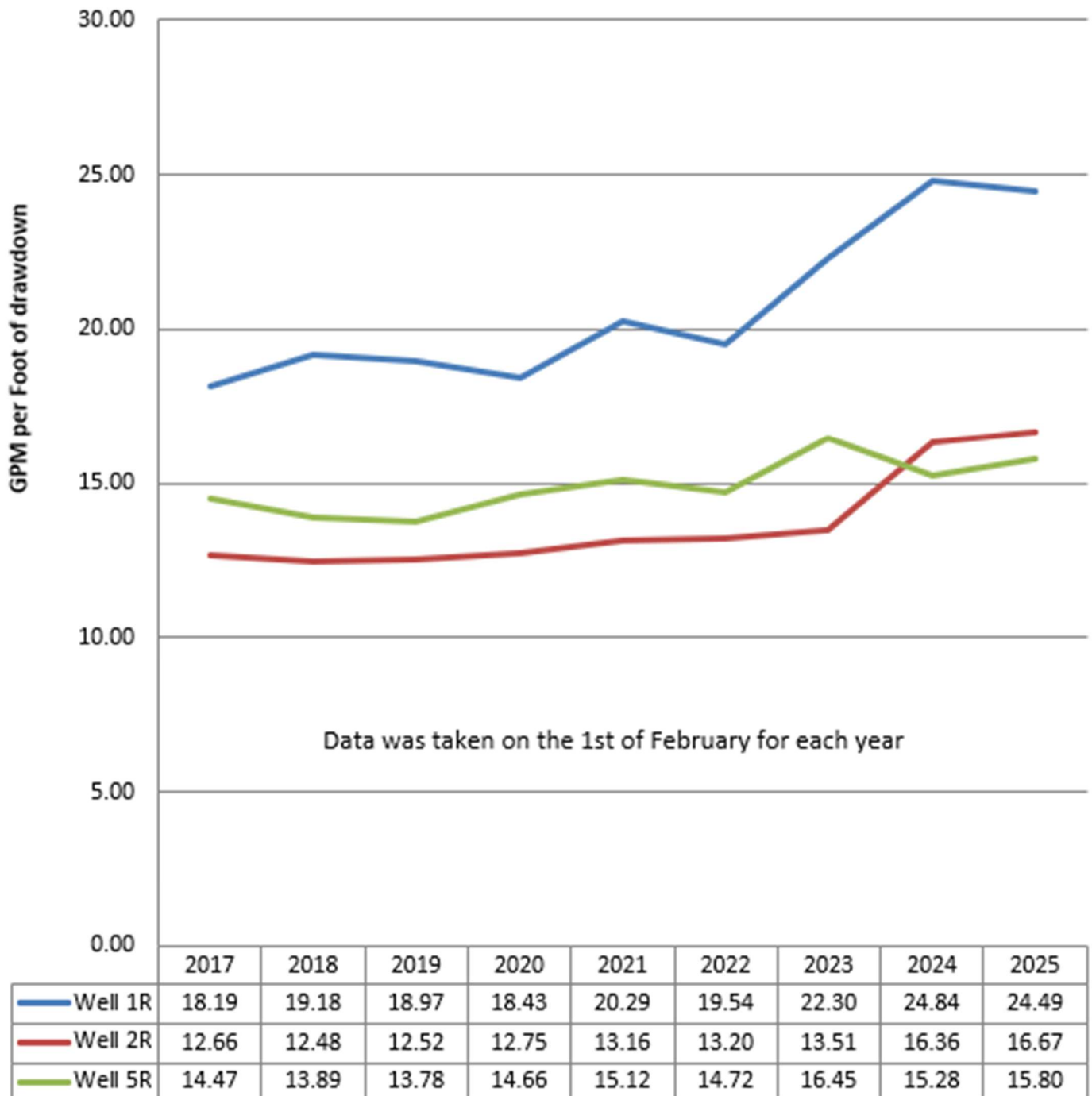


## 30 Year Water Production Trend

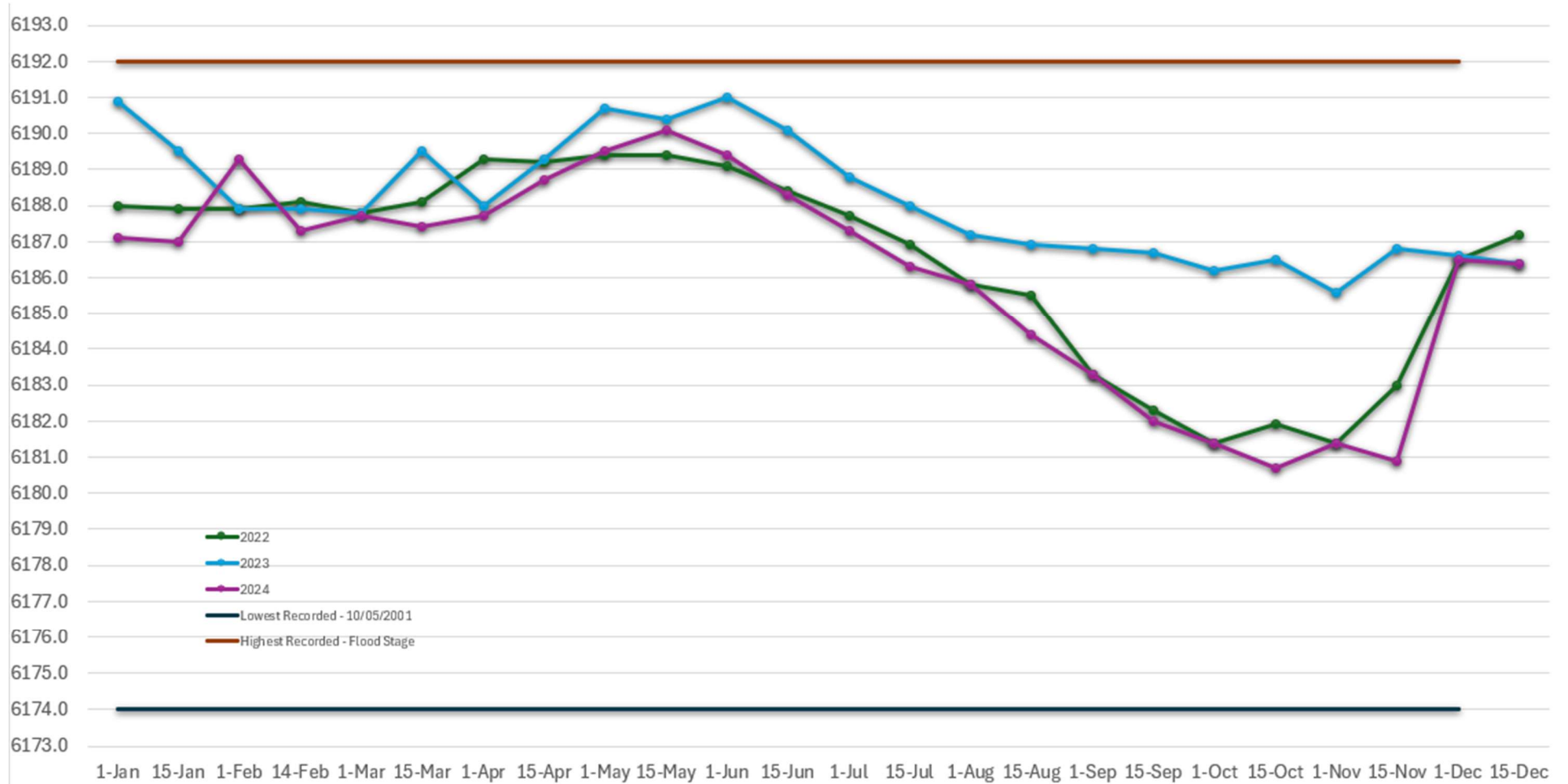


Information comes from from well logs

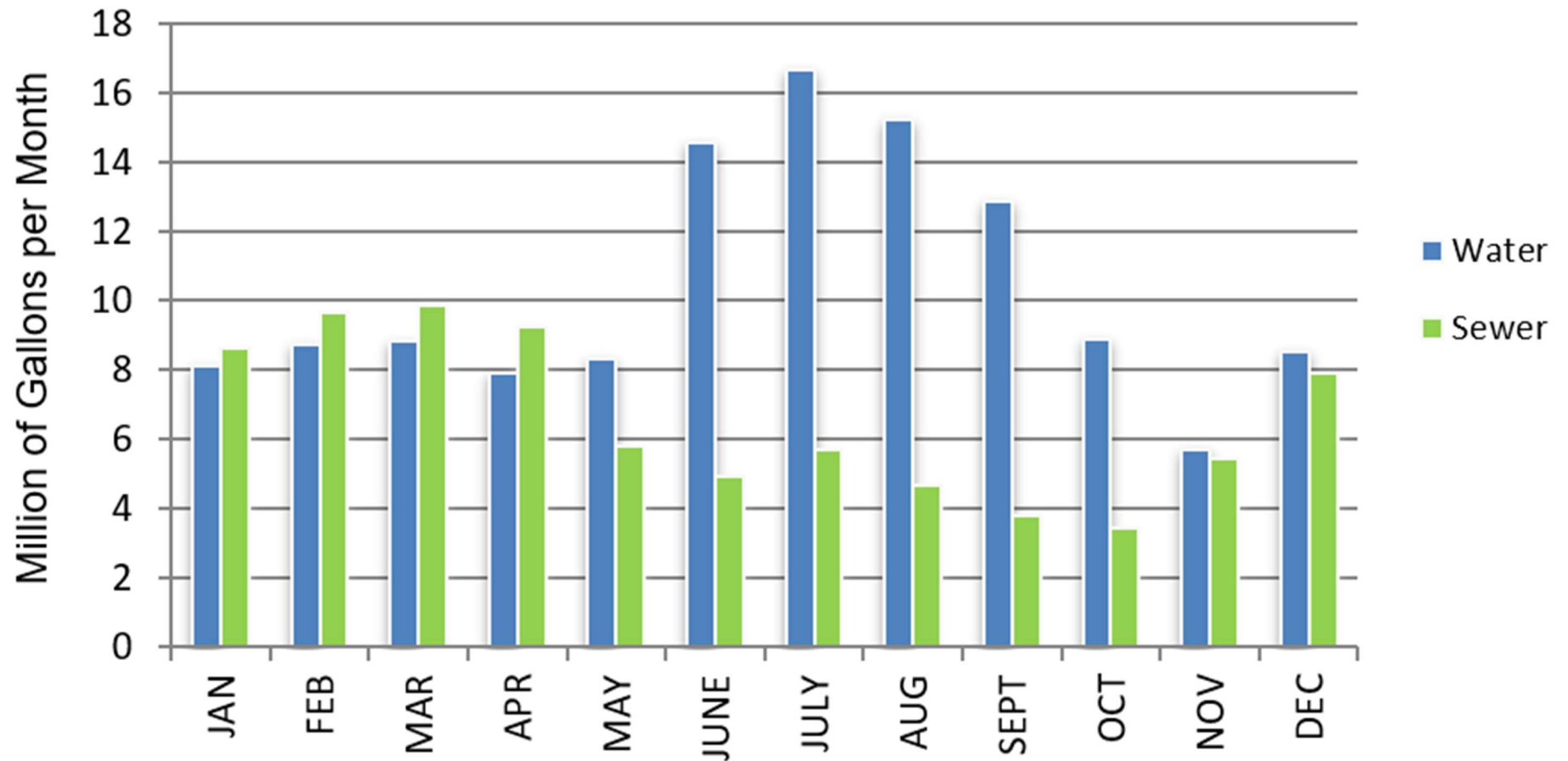
## Production Wells Specific Capacity



## Aquifer Levels 3 Year Trend



## Water & Sewer Comparison-Graph



Compares Total Monthly Water Production to Total Sewer Collection

Water information comes from well logs

Water total includes OVPD and SVMWC

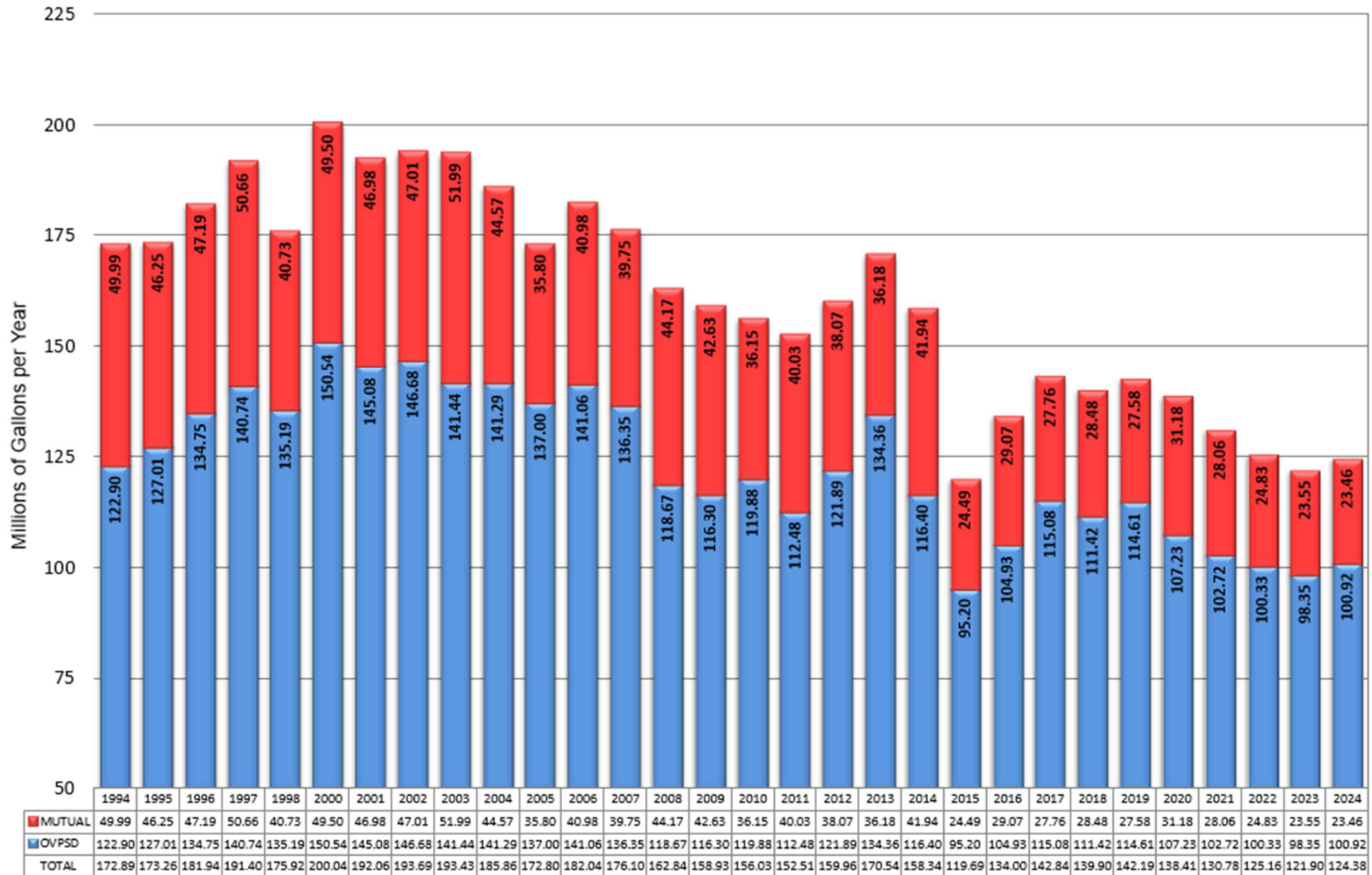
Sewer information comes from SCADA

## Water & Sewer Comparison-Data

	WATER	WATER	WATER	SEWER	
	OVPD	OVMWC	TOTAL	TOTAL	
JAN	6.88	1.21	8.09	8.61	
FEB	7.23	1.50	8.73	9.67	
MAR	7.31	1.54	8.85	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					



## 30 Year Combined Water Production Trend



Information comes from from well logs

# Sewer System Inventory – 2024

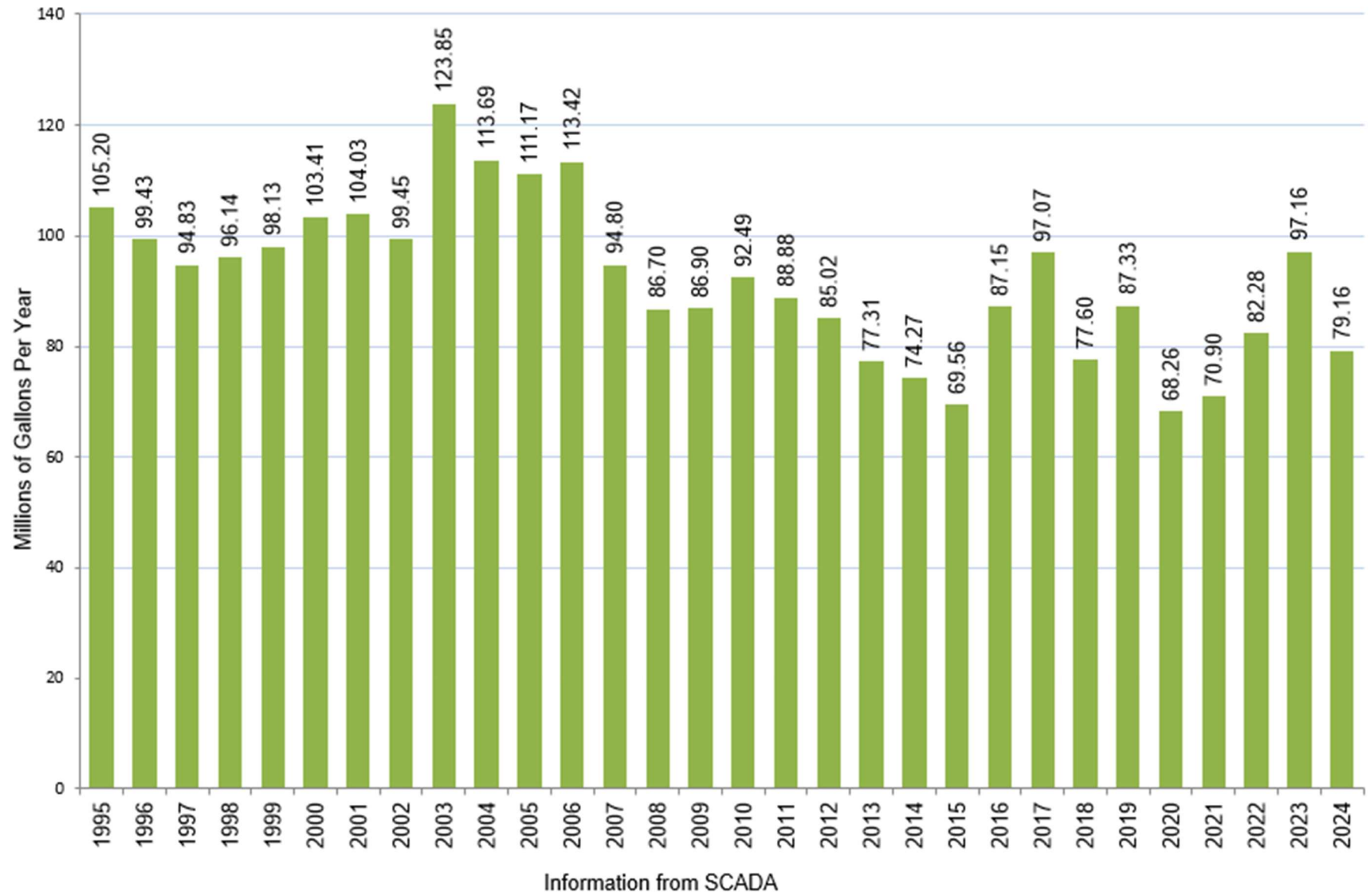
Updated Information to Match District GIS Database

- 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	= 95,362 Feet (18.06 Miles)
Total District Sewer Laterals	= 20,326 Feet (3.85 Miles)
Combined Totals	= 115,689 Feet (21.91 Miles)



## 30 Year Sewer Flow Trend

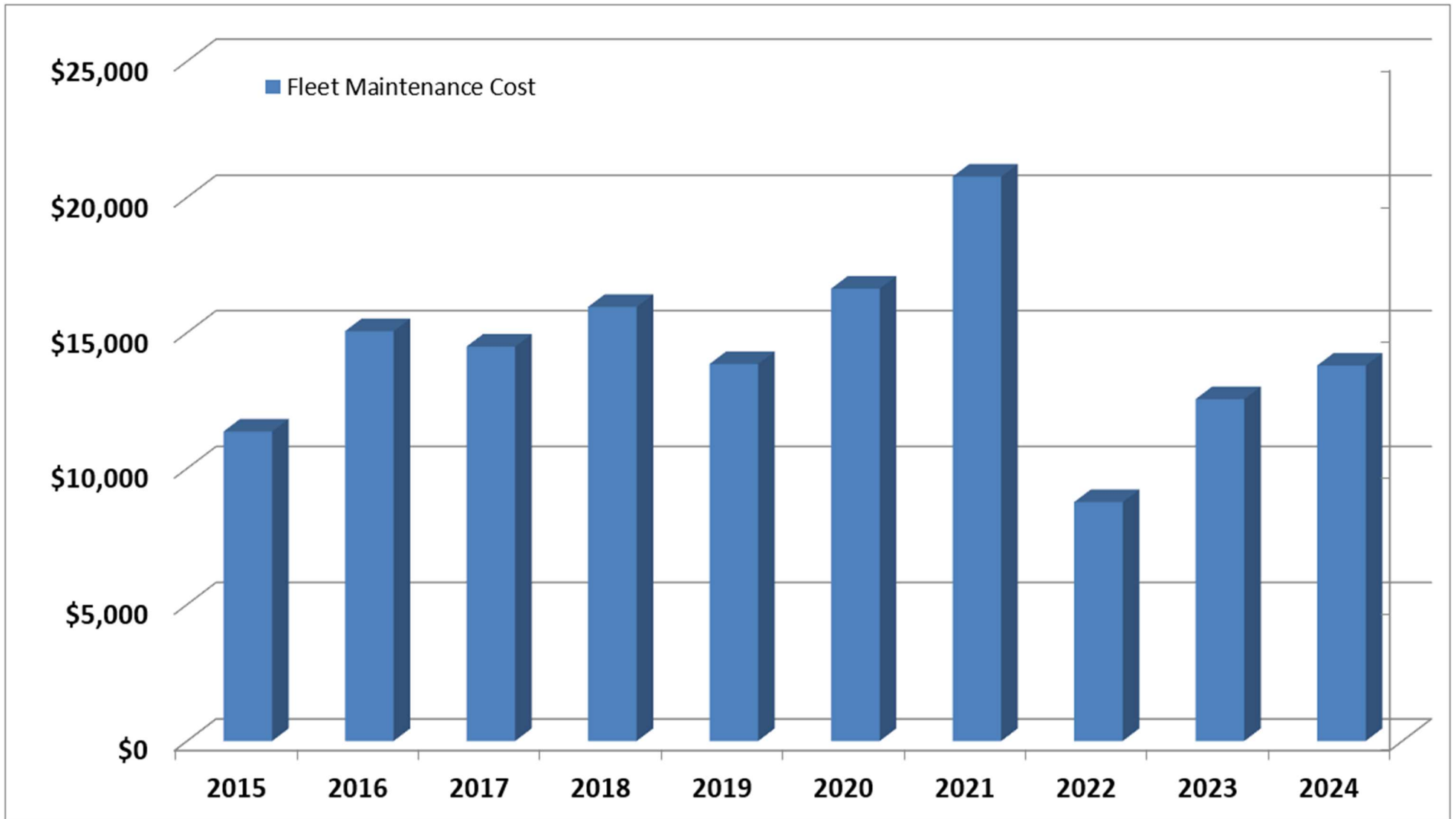


# Fleet

## 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 Ram 2500 Utility	4,093	1	15	14		Annual Service	\$300
						Tires	\$1,600
2014 Dodge Ram 4x4	68,445	11	15	4		Annual Service	\$300
						Axle seal service	\$680
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
						Batteries	\$300
						Hydraulic service	\$1,200
JD Backhoe	1,094 hr	7	30	23		Annual Service	\$300
2020 Isuzu I/R Compressor	22 hr	4	20	16		Annual Service	\$300
2007 NewHolland	707 hr	18	30	12		Annual Service	\$300
2009 Vac-Con Hydro-Vac	10,684	16	30	14		Annual Service	\$350
						Pump rebuild	\$1,500
Power Take 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
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 (1993)	304.3	32	40	8		Annual Service	\$300
1810 Generator (1991)	878.8	34	40	6		Annual Service	\$300
305 Generator (2004)	239.4	21	40	19		Annual Service	\$300
						Equipment	\$850
						Rags, Cleaning Supp. E ct.	\$411
<b>Total</b>	<b>Fleet Ave. Age</b>	<b>15.8947</b>					<b>\$13,791</b>

## Vehicle Maintenance Cost Trend





## Operation Department 10 Year Fuel Usage Trend

