

SQUAW VALLEY PUBLIC SERVICE DISTRICT



2014 WATER AND SEWER SYSTEM REPORT

Prepared April 2015

By

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and

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Squaw Valley Public Service District Annual Report 2014

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Hansen

This section has been eliminated and will be replaced with VUEWorks in 2015	3.01
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2015 Through 2020 Tentative Projects

I	Water Supply Enhancement	\$1,000,000
I	Easement Abatement Project	\$60,000
I	Mutual Water Company Intertie 50% Share	\$125,000
I	Replace 1997 Ford Explorer	\$30,000
I	SSMP Audit/ Update	\$7,500
I	Long Range Property Master Plan	\$10,000
I	SCADA Upgrade/ Master Plan	\$150,000
II	Aquifer Monitoring Program	\$98,000
II	Replace 2" Steel Water Mains	\$400,000
II	Replace Truckee River Siphon	\$500,000
II	Televise Sewer System	\$125,000
II	Replace Roof Utility Garage	\$60,000
II	Replace Roof Old Admin. 1810	\$40,000
II	Replace 1994 JCB Backhoe	\$90,000
III	East Facility LED Lighting Retrofit	\$20,000
III	Replace 1999 Ford F-250 Utility	\$32,000
III	Install Sewer Meters	\$150,000
III	Sierra Crest/ Winding Creek Sewer Rehabilitation	\$193,000
III	I & I Study	\$25,000
IV	Upgrade/ Replace Squaw Valley Interceptor	2,000,000
IV	Garbage Facility Design	\$30,000
IV	Re-grade East Facility Parking Lot	\$45,000
TOTAL =		\$5,190,500

I	Needed Now	II	Needed Soon
III	Improves Efficiency	IV	Needs Consideration

General Improvements 2014

Water System Improvements

- SCADA Master Plan \$15,430
- Well #3 Pump & Motor \$23,132
- Well 1R Repairs \$8,572
- Meter & Valve Box Project \$7,537
- Stables Water Main Repair \$30,734
- S Curve Water Main Replacement \$147,543

Sewer System Improvements

- Televis 25% of Sewer System \$39,733
- Aspens Sewer Realignment Project \$91,914

Building and Office Improvements

- Replace Copy Machine \$11,022
- Garbage Facility Gate \$3,865
- Seal & Stripe Parking Lot East Facility \$5,430

Vehicles and Equipment

- Bike Trail Snow Blower Purchase \$107,812
- 2014 Dodge Ram 1500 Crew Cab \$30,749

Grant Funded Projects

- Bike Trail Snow Removal Project \$74,500
- Design Mutual Intertie (\$10,000 PCWA Grant) \$14,215

TOTAL = \$612,008

Utilities Report 2014

I. Flow Report

A. Water Production Total = 116.40 MG
Comparison: 17.96 MG Less Than 2013

B. Sewer Collection Total = 74.27 MG
Comparison: 3.02 MG Less Than 2013

C. Aquifer Level 2014 Maximum Level February 11 2014: 6189.8'
 Minimum Level September 24 2014: 6179.7'

Total Change in Static Water Level 2013: 9.2'
Total Change in Static Water Level 2014: 10.1'

D. Precipitation Total 13/14 Water Year = 31.91"
 51-Year average = 51.66"
13/14 Water Year % of the 51- Year average = 61.50%

E. Flow Report Conclusions: Water production decreased 15% over the previous year.
Sewer collection decreased 4% over the previous year.

* The maximum level represents a rough average of the highest levels measured in the aquifer during spring melt period.

** The lowest level recorded in the aquifer was 6,174.0 feet above mean sea level on October 12, 2001. This level is not necessarily indicative of the total capacity of the aquifer.

*** Creek bed elevation (per Kenneth Loy, West Yost Associates) near Well 2r is 6,186.9 feet.

**** The season total is calculated from October 2013 through September 2014.

***** The true average could be higher or lower than the reported value due to the uncertainty of the Old Fire Station precipitation measurement during the period 1994 to 2004.

***** The production number is different than scada reports due to time of day reading issues.

II. Leaks, Repairs, and Maintenance

A. Water

1. New meters installed: 8
2. Water meters replaced: 3
3. Water meter upgrades: 0
4. Customer service water meters turned on or off: 12
5. Routine leak/high usage detection notification: 144
6. Customer requested leak detection services performed: 29
7. No water responses: 2
8. Fire hydrants flushed: 135
9. Blow-offs flushed: 24
10. Valves exercised: 61
11. Repair/Replace service line: 2
12. Repair leak on water main: 3
13. Backflow devices tested: 511
14. Test District backflows: 8
15. Quarterly vault inspections on Well 1R and Well 3: 8
16. Water tank inspections: 8
17. Water quality complaints serviced: 0
18. Tested commercial meters: 0
19. Replaced Air/Vac breakers: 0
20. Water samples collected:
 - Bacteriological: 24
 - Nitrate: 5
 - VOC's: 1
 - Primary: 1
 - Secondary: 1
 - Gross Alpha: 2
 - Nitrite: 5
 - Asbestos: 1
 - Hexavalent Chromium: 5

B. Sewer

1. Sanitary sewer overflows: 0
2. Main line repairs: 0
3. Service line repairs: 1
4. Sewer cleanout repair: 1
5. Manhole repairs: 2
6. Manhole grouting: 0
7. Cleaning:
 - Spring and fall cleaning of high priority lines
 - Main sewer lines cleaned: 220
8. Inspections:
 - Sewer code related inspections: 4
 - Pre-remodel inspections: 25
 - Finals inspections: 16
 - USA locations: 159

III. Building and Grounds Maintenance and Repair

A. 305 Squaw Valley Road Fire Department and Administration

1. Continued monthly service and maintenance of facility and equipment.

B. 1810 Squaw Valley Road District Equipment Garage

1. Continued monthly service and maintenance of facility and equipment.

IV. Vehicles and Equipment

A. Vehicles

1. All vehicles received an annual service, with the exception of the Ford Ranger and Ford Explorer which received biannual services.
2. Worked to transition maintenance and record keeping over to Vue Works.

B. Equipment

1. All small equipment received an annual service.
2. Worked to transition maintenance and record keeping over to Vue Works.

V. Administrative

A. Hanson data input.

B. Vue Works migration from Hanson.

VI. Operation & Maintenance Projects

- A. Repaired main line leak in stables area.
- B. Repaired main line leak in the S-Turn's area.
- C. Replaced section of main in the S-Turn's area.
- D. Leak detection on small diameter metal pipe mains.
- E. Inspected the Squaw Valley Rd. water main in multiple locations.
- F. Replaced pump and motor on Well 1R.
- G. Replaced pump and motor on Well 3.
- H. Took on Operations and Maintenance of SV Mutual Water Company.
- I. Helped and oversaw the Aspen's Sewer Main Replacement Project.
- J. Cleaned sewers mains in front of the 2nd phase of the CCTV Project.

VII. Summary

The Operations Department had a challenging year in 2014. Due to injuries and illnesses, the Department had to catch up from the previous year. The District's crew was able to get to some of the projects that had been postponed due to lack of crew and time. This season the District was able to make many repairs to damaged assets. The District took on a contract to operate and maintain the Squaw Valley Mutual Water Company.

VIII. Safety Training

- | | |
|-----------|--|
| 1/17/2014 | Ergonomics, SDRMA Safety Booklet
Jesse, Josh, Brandon, Schel, Jason, Blaine |
| 2/14/2014 | Medical Emergencies, SDRMA Safety Booklet
Jesse, Josh, Brandon, Schel, John, Jason |
| 3/7/2014 | Pro-Active Safety Attitudes, SDRMA Safety Booklet
Jason, Blaine, Brandon, Schel, John |

- 4/11/2014 Defensive Driving, SDRMA Safety Booklet
Jesse, Josh, Brandon, Schel, John, Jason, Blaine
- 5/9/2014 Working Outdoors, SDRMA Safety Booklet
Jason, Josh, Brandon, Schel, John, Schel
- 7/18/2014 Travel Safety, SDRMA Safety Booklet
Brandon, Jason, John, Jesse
- 8/15/2014 Housekeeping, SDRMA Safety Booklet
Jason, John, Josh, Brandon, Jesse
- 11/14/2014 Customer Service, SDRMA Safety Booklet
Brandon, Josh, Jason, Jesse, Devin
- 11/26/2014 Holiday Safety, SDRMA Safety Booklet
Brandon, Josh, Jason, Devin, Tyler
- 12/5/2014 Water Industry General Const. Safety, SDRMA Online
Tyler, Devin
- 12/12/2014 Water Industry Hand and Power Tool Safety, SDRMA Online
Tyler, Devin, Jason
- 12/23/2014 Slips Trips and Falls, SDRMA Safety Booklet
Brandon, Josh, Jason, Devin, Tyler
- 12/26/2014 Water Industry Asbestos Awareness, SDRMA Online
Devin, Tyler
- 12/26/2014 Water Industry Confined Space Entry, SDRMA Online
Devin, Jason, Tyler

IX. Occupational Training

- 4/17/2014 Certified Utility Locator, UTA
John, Blaine
- 4/29-5/1/2014 Cal Rural Water Education Expo
John, Jason, Blaine
- 5/7/2014 CWEA Safety Day
Schel, Brandon
- 6/26/2014 ICS, NIMS and SEMS Workshop, CA/NV AWWA
Brandon
- 7/11/2014 Backflow Prevention Tester Review, B and L
John
- 10/22-23/2014 CA/NV AWWA Annual Conference
Josh, Jason, Jesse, Brandon
- 12/2/2014 Excavation Safety, United Rentals
Tyler, Devin

Water System Inventory – 2014

Part I

1. Water Well #1R – 400 GPM
2. Water Well #2R – 350 GPM Max (230 GPM Summer)
3. Water Well #3 – 130 GPM
4. Water Well #4 – (Not in Service)
5. Water Well #5R – 405 GPM
6. Horizontal Well – 10 GPM Current Total Capacity – 1,295 GPM
7. (1) 1,150,000 Gallon Water Tank
8. (1) 500,000 Gallon Water Tank
9. (1) 135,000 Gallon Water Tank Total Storage – 1,780,000 Gallons
10. 2 Booster Pumping Stations
11. 788 Water Meters connected per Billing
12. 130 Fire Hydrants
13. 28 Air Release Valves
14. 503 Backflow Prevention Devices
15. 394 Gate Valves
16. 17 Butterfly Valves
17. 26 Blow Off Assemblies
18. 7 Altitude Valves
19. 3 Transducer Stations (West Tank, East Tank, and Zone Three Tank)
20. 9 Remote Terminal Units (RTU), SCADA Telemetry System

Water System Inventory – 2014

Part II

21. 12,761 Feet 12" Water Distribution Main
22. 10,752 Feet 10" Water Distribution Main
23. 28,161 Feet 8" Water Distribution Main
24. 21,618 Feet 6" Water Distribution Main
25. 696 Feet 4" Water Distribution Main
26. 990 Feet 2" Water Distribution Main
27. 439 Feet 6" Water Service Line
28. 240 Feet 4" Water Service Line
29. 2,284 Feet 2" Water Service Line
30. 254 Feet 1.25" Water Service Line
31. 39 Feet 1.5" Water Service Line
32. 2,957 Feet 1" Water Service Line
33. 128 Feet $\frac{3}{4}$ " Water Service Line

Total Water Main = 74,978 Feet = 14.2 Miles

Total Water Services = 6,341 Feet = 1.2 Miles

Combined Total = 81,319 Feet = 15.4 Miles

Squaw Valley Public Service District - Year End Water Audit Report

Report Date: April 13, 2015 Performed By: Brandon Burks
Year: 2014

Begin Audit Period: 1/2/14 12:00 AM
End Audit Period: 12/31/14 12:00 AM

Total Metered Consumption for audit period specified (including hydrant meters): 89,090,927

Additional Consumption - Unmetered

Fire Department Use: 116,700
Hydrant Flushing: 1,038,988
Blow-Off Flushing: 35,047
Sewer Cleaning: 17,000
Street Cleaning:
Well Flushing: 97,247
Tank Overflows:
Unread Meter Estimated Reads: 15,000
Other: 24,000

Total Unmetered Consumption (for audit period specified): 1,343,982

Estimated Unknown Loss - Unmetered

Known Theft: _____
Known Illegal Connections: _____
Total Estimated leaks that have been repaired: 3,916,000
Total Estimated Unmetered (for audit period specified): 3,916,000

Total Production for audit period specified: 115,632,299

Total Metered/Unmetered Consumption for audit period specified: 94,350,909

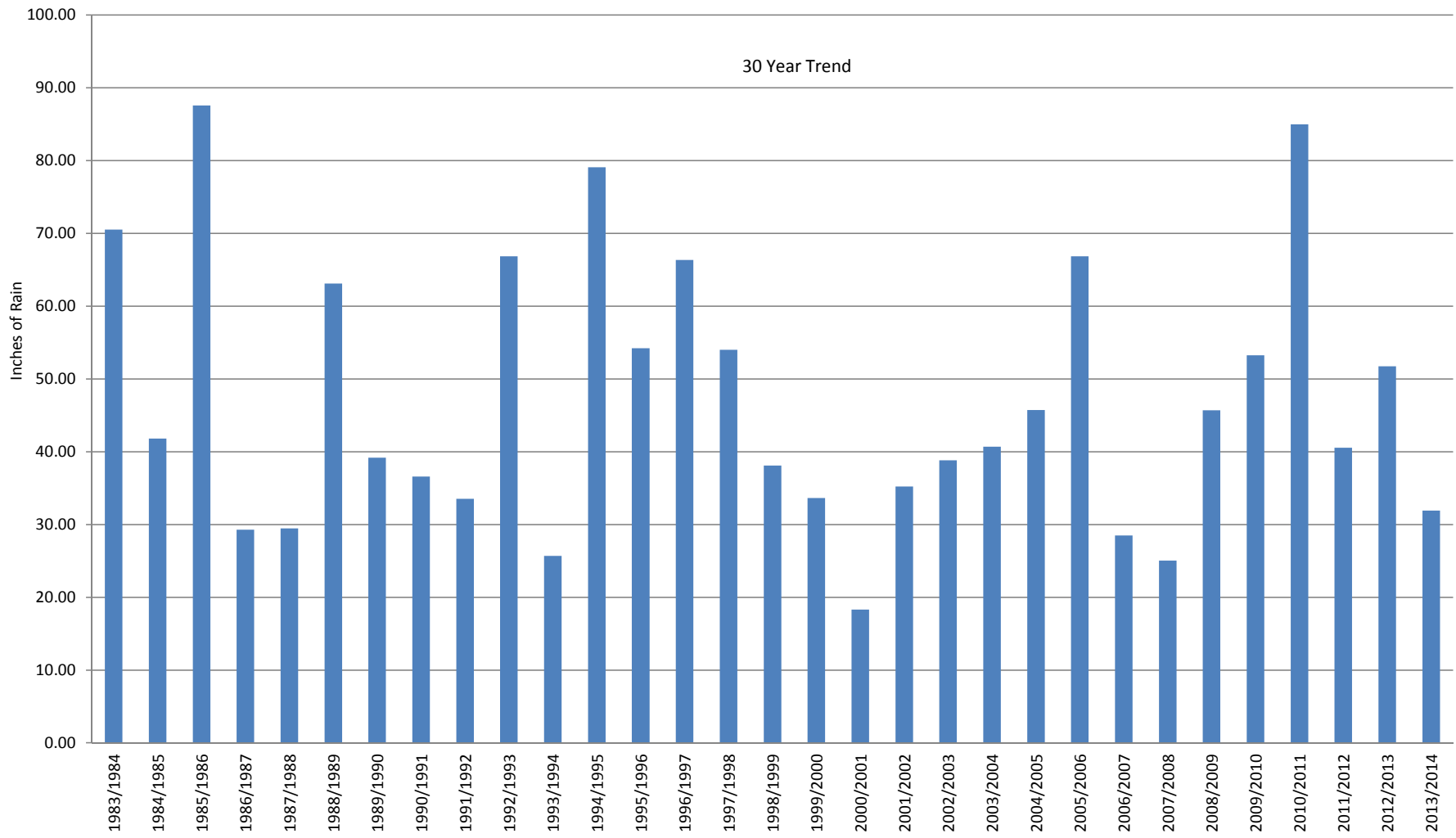
Total Water Loss (Production - Consumption): 21,281,390
Loss Percentage: 18.4% ***

Comments: The production totals are different than the annual report due to a different time frame being used. The water audit uses the meter reading schedule dates. The water loss amount was reduced 14.7 million gallons of water from 2013. The loss percentage was reduced 8.3% from 2013. Major leaks were repaired at the Stables Property and at the S-Turns area.

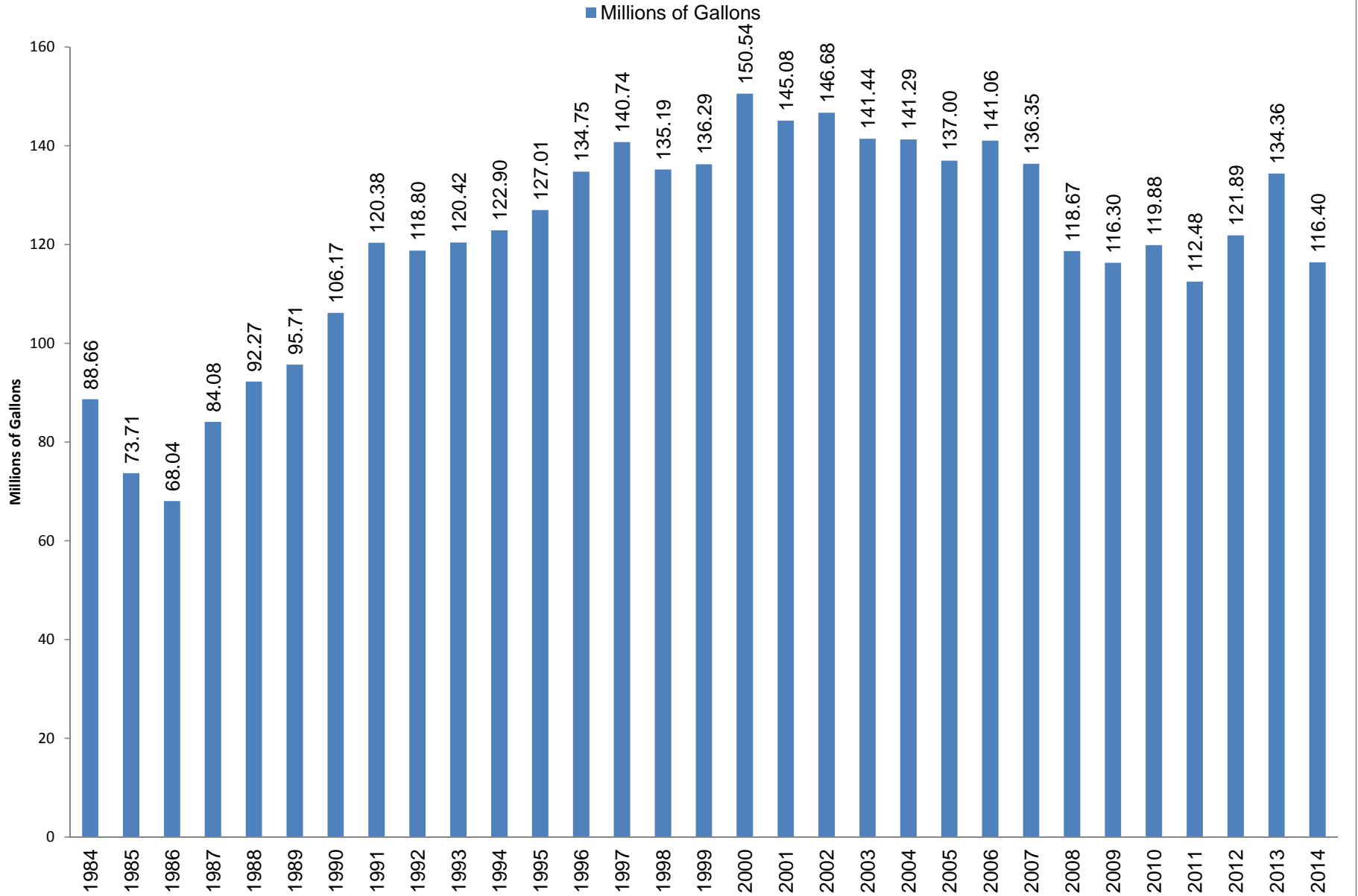
* Note - All Production & Consumption Totals In U.S. Gallons *

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

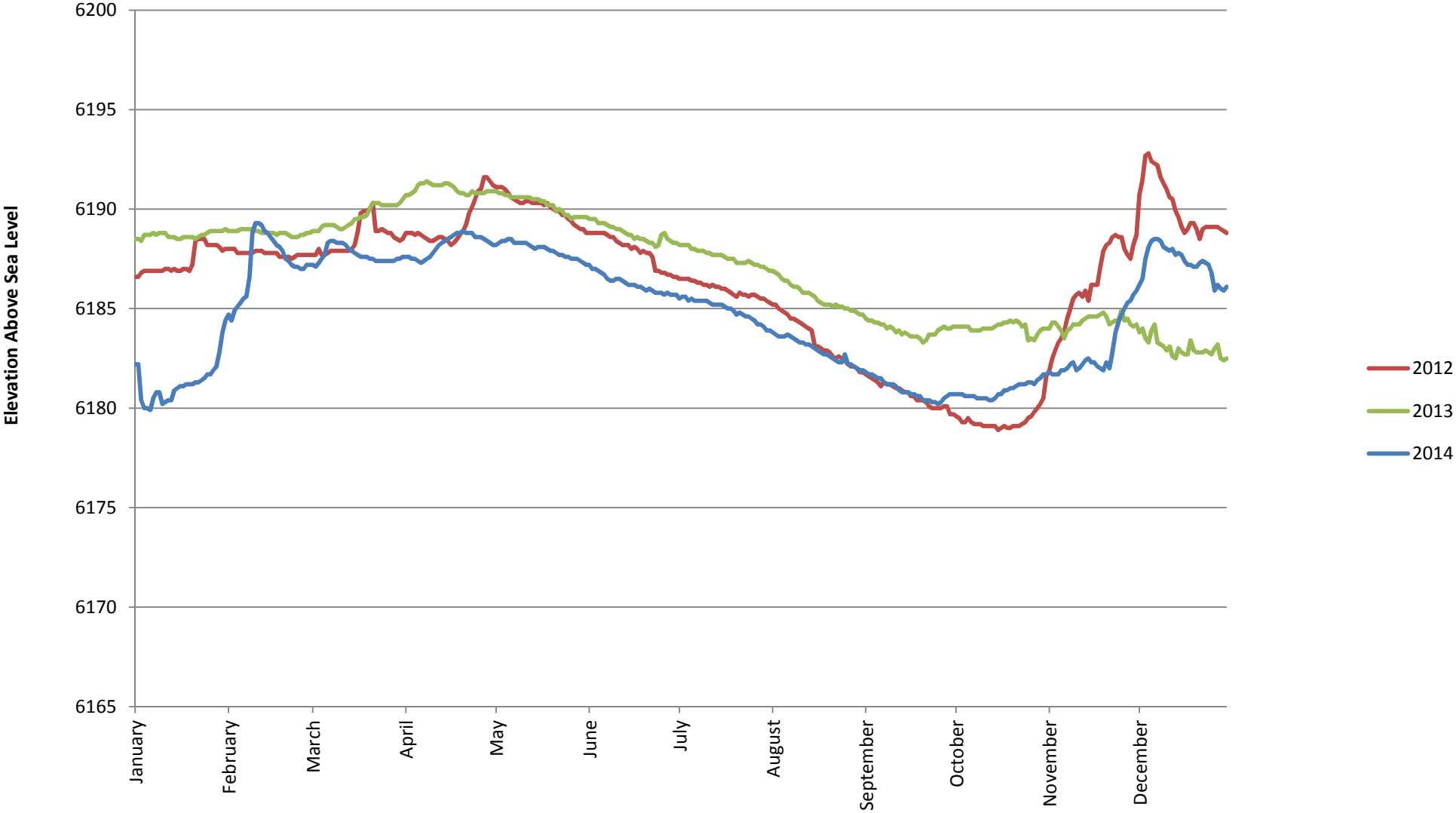
Squaw Valley Public Service District Precipitation



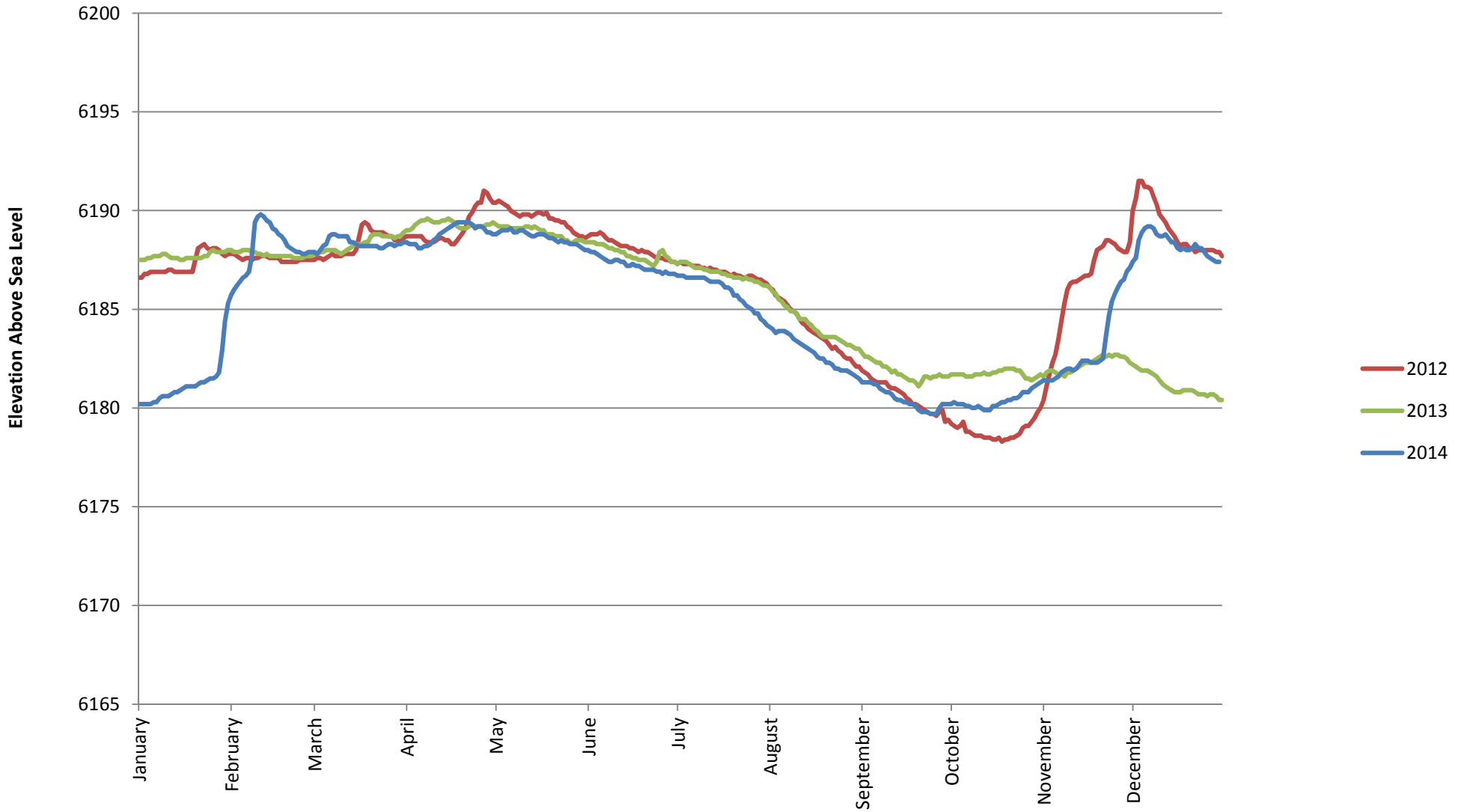
SVPSD 30 Year Water Production Trend



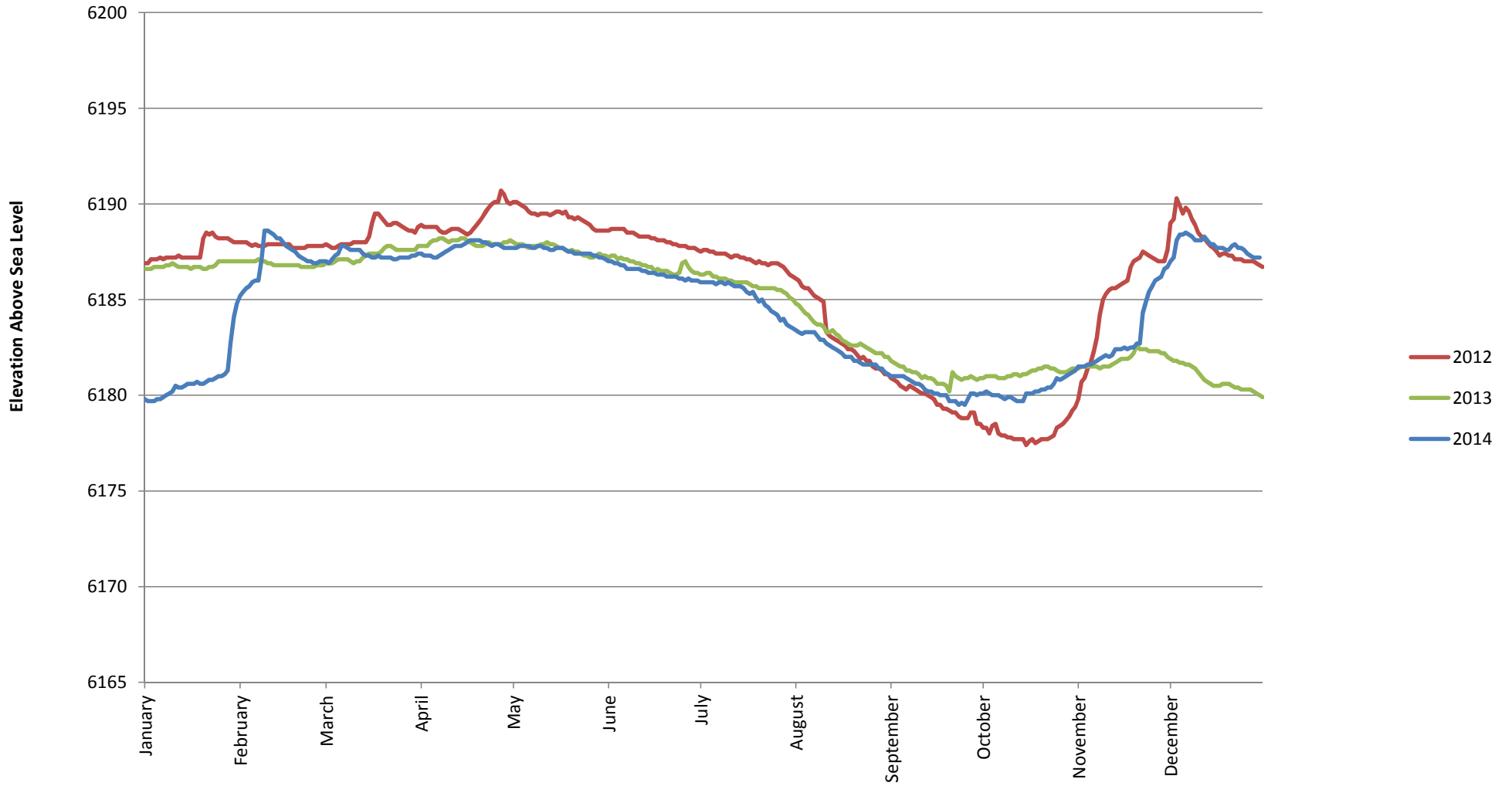
SVPSD Water Well 1R 3 Year Aquifer Trend



SVPSD Water Well 2R 3 Year Aquifer Trend

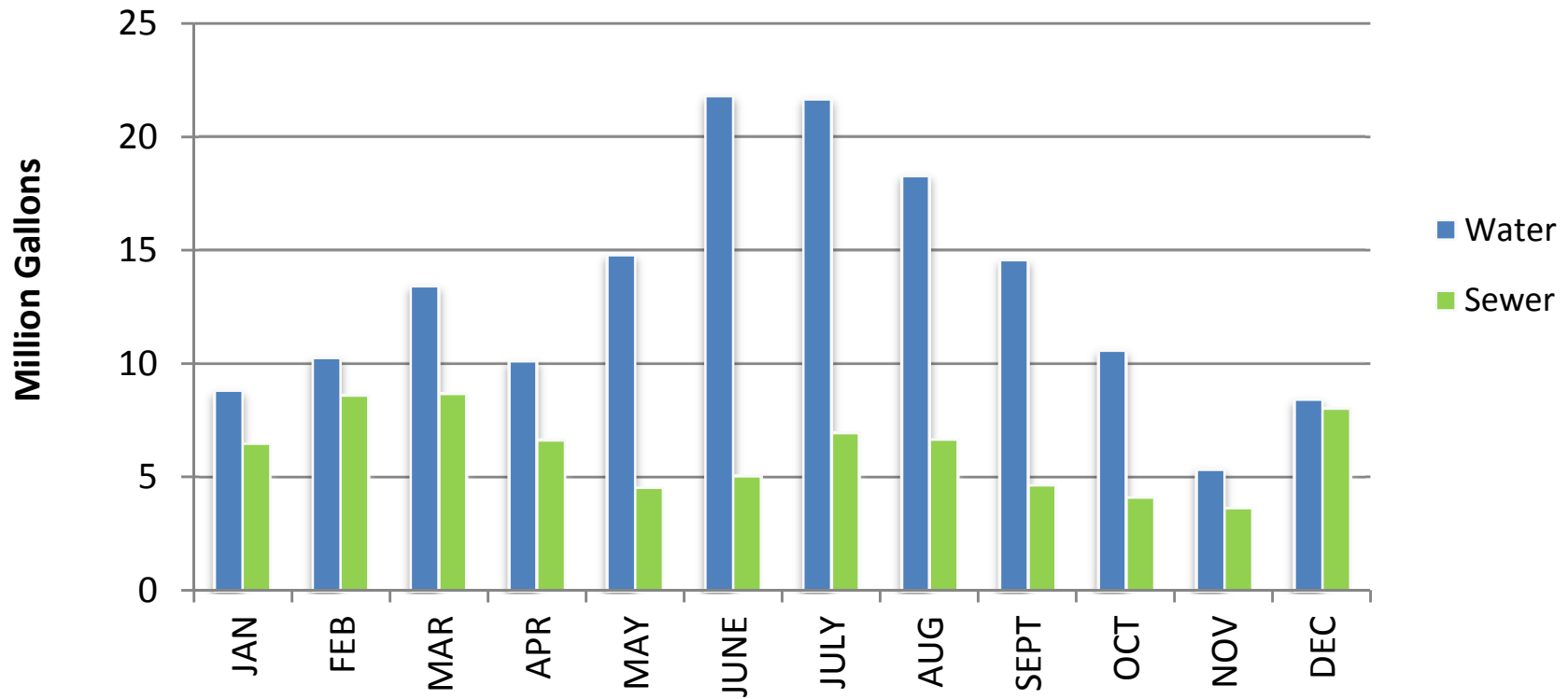


SVPSD Water Well 5R 3 Year Aquifer Trend



Pump Run Hours							
	Well #1R	Well #2	Well #3	Well #5R	E Boost	Zone-3 #1	Zone-3 #2
Year Installed	2005	1991	2008	1999	1992	1990	1990
1990						30	30
1991		1,680				98	66
1992		2,863				112	84
1993		3,528			121	120	99
1994		3,249			489	136	146
1995		2,221			1,273	223	160
1996		1,919			208	363	145
1997		1,950	100		405	538	338
1998		2,107	1,418		376	438	352
1999		2,936	0	106	1,649	612	264
2000		2,276	7	2,097	1,504	527	640
2001		1,969	0	2,019	698	631	573
2002		2,007	325	2,198	1,545	493	514
2003		1,613	1,719	2,007	1,440	509	503
2004		1,796	1,820	1,866	1,646	541	550
2005	209	2,100	2,101	2,174	1,169	486	473
2006	1,868	1,877	1,877	1,681	1,853	455	468
2007	1,796	1,803	1,797	1,696	467	1,677	438
2008	1,552	1,545	529	1,574	1,255	477	460
2009	1,546	1,539	1,548	1,568	1,249	477	460
2010	1,633	1,666	1,638	1,432	1,363	381	362
2011	1,866	687	620	1,983	1,169	353	344
2012	1,563	1,561	1,452	1,681	1,492	510	482
2013	1,927	1,923	0	1,884	1,481	417	408
2014	933	1,985	642	1,991	1,419	391	393
Total Hours	14,893	48,800	17,593	27,957	24,271	10,995	8,752

2014 Water Sewer Comparison



Compares Total Monthly Water Production to Total Sewer Collection
(Includes Mutual Water Company)

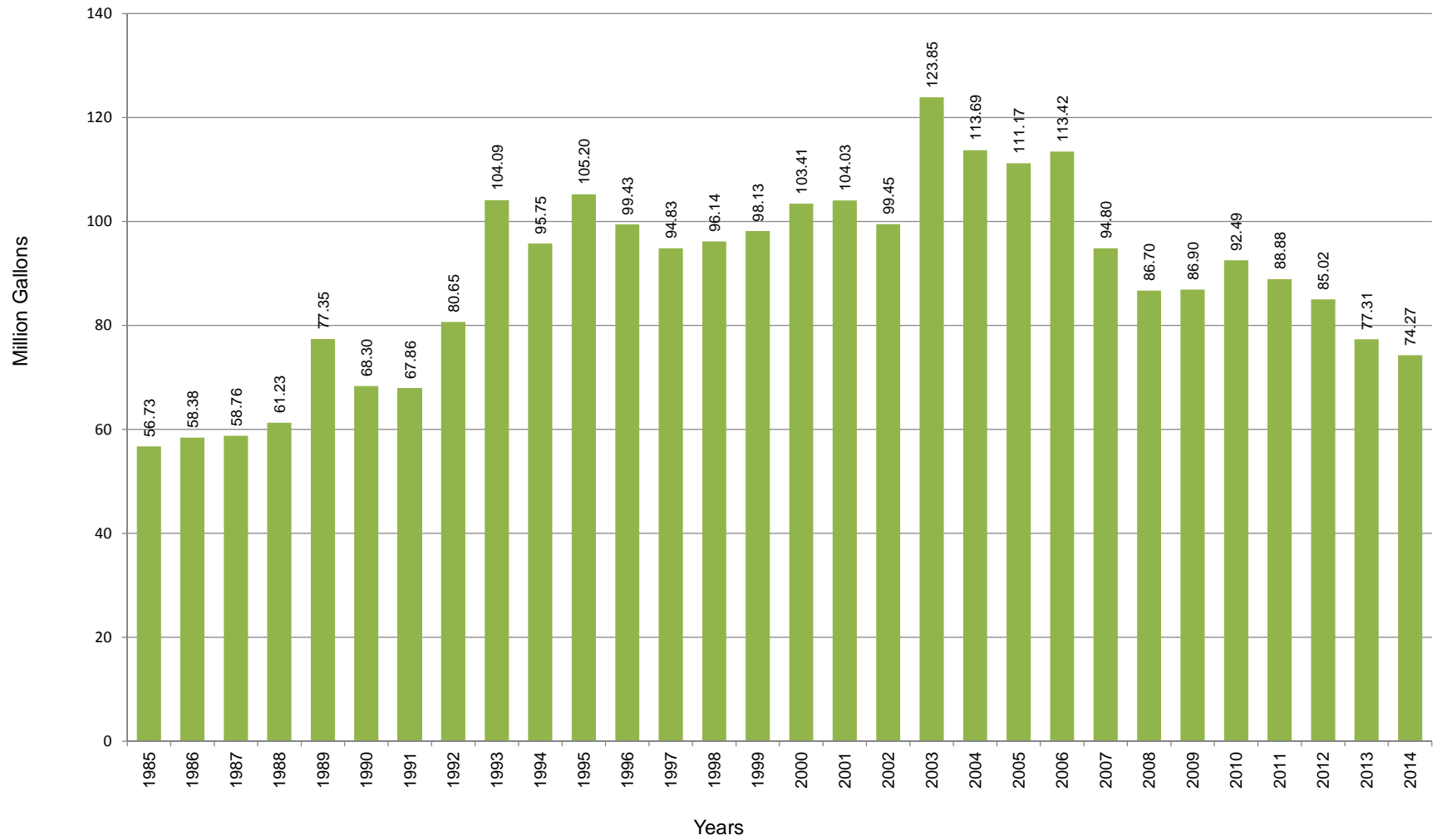
Water and Sewer Production 2014					
	WATER	WATER	WATER	SEWER	
	SVPSD	MUTUAL	TOTAL	TOTAL	
JAN	6.51	2.31	8.82	6.50	
FEB	7.42	2.85	10.27	8.63	
MAR	10.64	2.80	13.44	8.71	
APR	6.64	3.50	10.14	6.65	
MAY	9.33	5.47	14.80	4.56	
JUNE	15.35	6.46	21.81	5.07	
JULY	16.32	5.37	21.69	6.98	
AUG	13.94	4.37	18.31	6.67	
SEPT	11	3.60	14.60	4.66	
OCT	7.82	2.79	10.61	4.13	
NOV	4.2	1.18	5.38	3.65	
DEC	7.23	1.23	8.46	8.05	
	116.40	41.94	158.34	74.27	Million Gallons

SEWER SYSTEM INVENTORY – 2014

1. 430 Sanitary Manhole Per VUEWorks
2. 2 Siphons (6"-10")
3. 5 Sewer Flow Meter
 - Mag Meter, Painted Rock Siphon T-45A - District owned
 - Mag Meter, Mountain Run - Ski Corp owned
 - Mag Meter, HWY 89 - T-TSA owned
 - Flume Meter, HWY 89 - T-TSA owned (Not in Service)
 - Flume Meter, Victor - District owned (Not in Service)
4. 172 Feet 16" Sewer Main
5. 11,791 Feet 15" Sewer Main
6. 2,689 Feet 12" Sewer Main
7. 9,245 Feet 10" Sewer Main
8. 17,957 Feet 8" Sewer Main
9. 51,560 Feet 6" Sewer Main
10. 6,687 Feet 4" Sewer Main
11. 43,372 Feet 4" Sewer Lateral
12. 1,041 Sewer Connections
13. 2 Remote Terminal Units (RTU)

Total Sewer Main = 100,101 Feet = 18.96 Miles
Total Sewer Laterals = 43,372 Feet = 8.21 Miles
Combined Totals = 143,473 Feet = 27.17 Miles

30 YEAR SEWER FLOW TREND



SVPSD - ANNUAL WATER SYSTEM REPORT



REPORTING PERIOD
1/1/2014 12:00 AM
1/1/2015 12:00 AM

WELLS - MONTHLY PRODUCTION TOTALS (Mgal)

Monthly Report Periods		Well 1R	Well 2R	Well 3	Well 5R	Horizontal Well	Monthly Subtotal
1/1/2014 12:00 AM	2/1/2014 12:00 AM	0.199	2.397	0.284	3.764	0.292	6.936
2/1/2014 12:00 AM	3/1/2014 12:00 AM	0.000	2.911	0.048	4.181	0.272	7.412
3/1/2014 12:00 AM	4/1/2014 12:00 AM	0.000	4.534	0.050	5.574	0.423	10.580
4/1/2014 12:00 AM	5/1/2014 12:00 AM	0.990	2.627	0.006	2.945	0.211	6.779
5/1/2014 12:00 AM	6/1/2014 12:00 AM	3.195	2.487	0.000	2.747	0.741	9.170
6/1/2014 12:00 AM	7/1/2014 12:00 AM	5.356	4.056	0.000	4.453	1.255	15.120
7/1/2014 12:00 AM	8/1/2014 12:00 AM	4.075	4.977	0.021	5.991	1.354	16.417
8/1/2014 12:00 AM	9/1/2014 12:00 AM	0.037	4.663	1.918	5.975	1.352	13.946
9/1/2014 12:00 AM	10/1/2014 12:00 AM	3.273	2.327	1.256	3.469	0.805	11.129
10/1/2014 12:00 AM	11/1/2014 12:00 AM	2.512	1.585	0.891	2.392	0.468	7.848
11/1/2014 12:00 AM	12/1/2014 12:00 AM	1.396	0.954	0.498	1.333	0.181	4.362
12/1/2014 12:00 AM	1/1/2015 12:00 AM	1.943	1.949	0.709	2.196	0.309	7.107
Annual Site Totals (Mgal):		22.976	35.465	5.681	45.020	7.663	

Annual Total (Mgal): 116.806

BOOSTERS - MONTHLY FLOW TOTALS (Mgal)

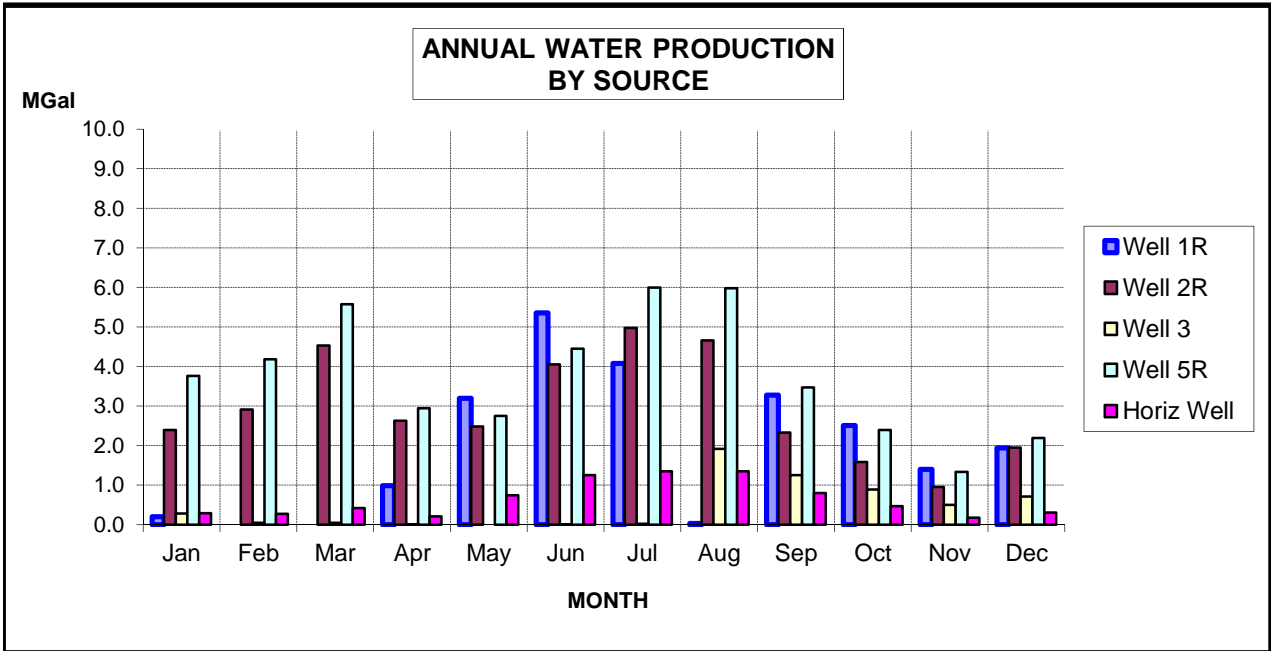
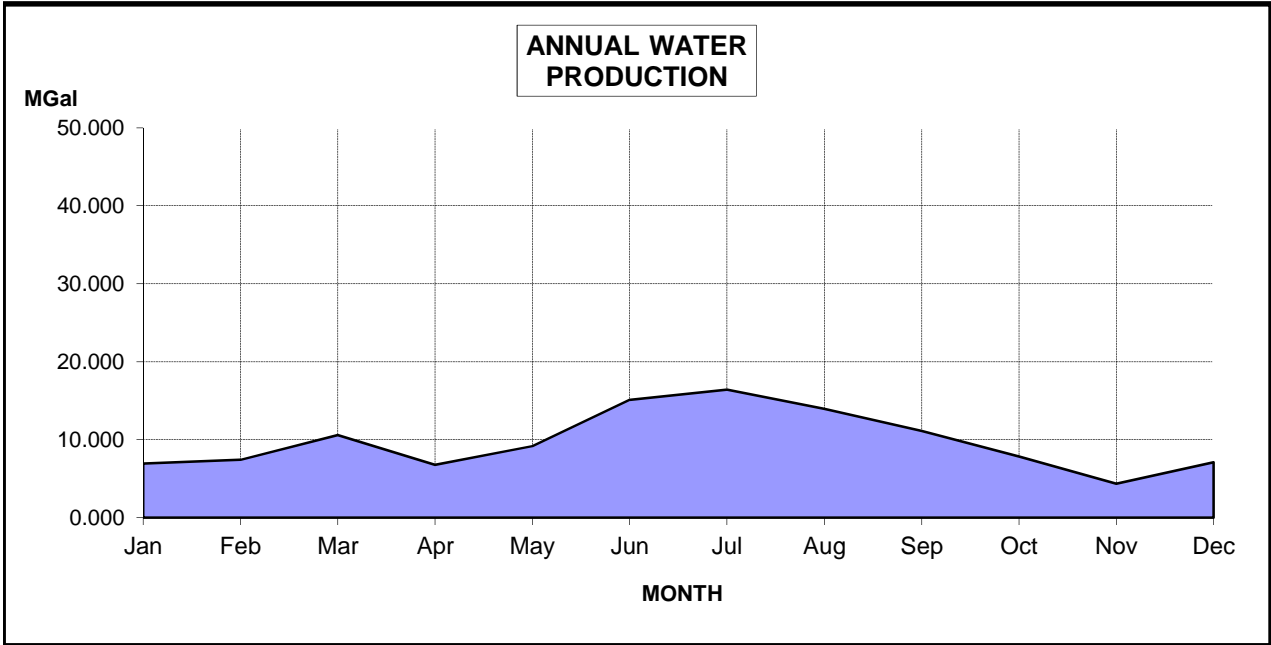
Monthly Report Periods		East Booster	Zone 3 Booster	Monthly Subtotal
1/1/2014 12:00 AM	1/1/2014 12:00 AM	1.270	0.130	1.399
2/1/2014 12:00 AM	2/1/2014 12:00 AM	1.177	0.119	1.296
3/1/2014 12:00 AM	3/1/2014 12:00 AM	1.056	0.073	1.129
4/1/2014 12:00 AM	4/1/2014 12:00 AM	1.241	0.111	1.352
5/1/2014 12:00 AM	5/1/2014 12:00 AM	1.363	0.446	1.809
6/1/2014 12:00 AM	6/1/2014 12:00 AM	2.127	0.912	3.039
7/1/2014 12:00 AM	7/1/2014 12:00 AM	2.206	1.254	3.460
8/1/2014 12:00 AM	8/1/2014 12:00 AM	1.839	0.943	2.783
9/1/2014 12:00 AM	9/1/2014 12:00 AM	1.629	0.887	2.516
10/1/2014 12:00 AM	10/1/2014 12:00 AM	1.243	1.055	2.298
11/1/2014 12:00 AM	11/1/2014 12:00 AM	0.606	0.075	0.681
12/1/2014 12:00 AM	12/1/2014 12:00 AM	1.173	0.099	1.272
Annual Site Totals (Mgal):		16.930	6.104	

Annual Total (Mgal): 23.034

SVPSD - ANNUAL WATER SYSTEM REPORT



REPORTING PERIOD
1/1/2014 12:00 AM
1/1/2015 12:00 AM



SVPSD - ANNUAL WATER SYSTEM REPORT



REPORTING PERIOD
1/1/2014 12:00 AM
1/1/2015 12:00 AM

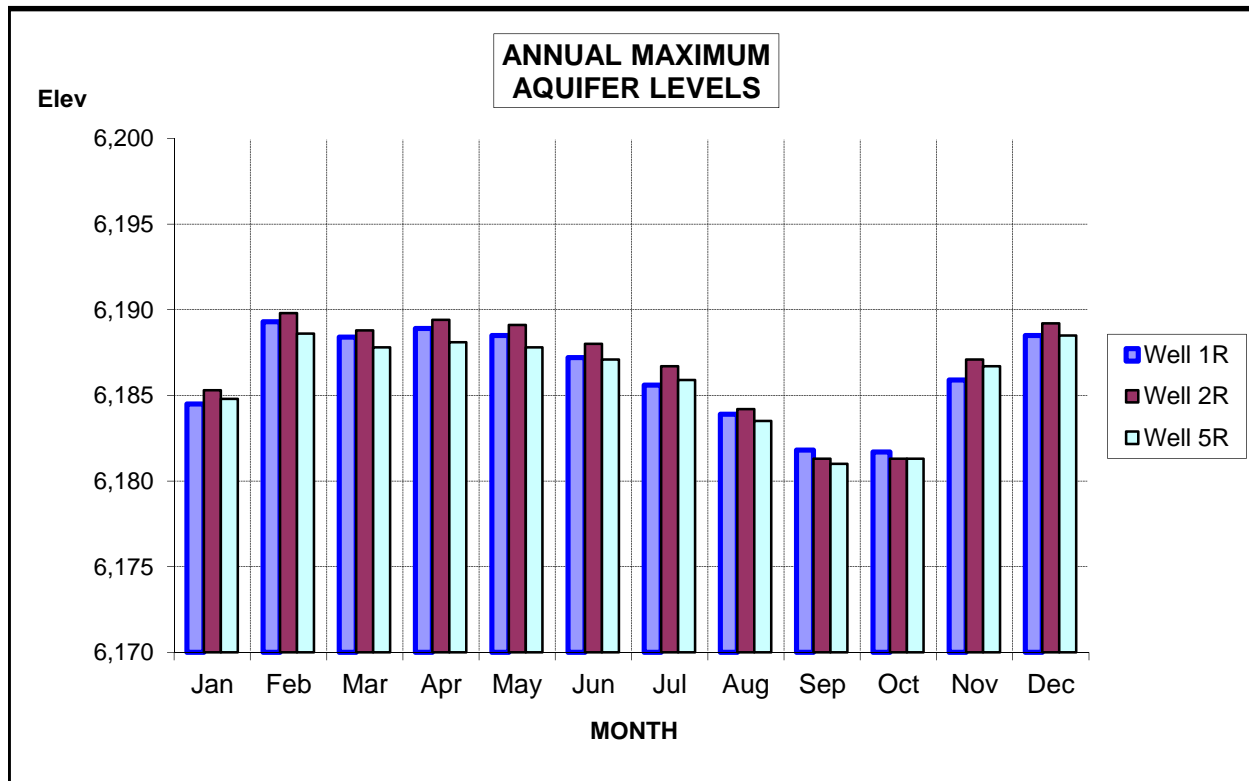
WELLS - MAXIMUM STATIC MONTHLY WATER ELEVATIONS (FT)

Monthly Report Periods		Well 1R	Well 2	Well 3	Well 5
1/1/2014 12:00 AM	2/1/2014 12:00 AM	6,184.5	6,185.3	<i>No Data</i>	6,184.8
2/1/2014 12:00 AM	3/1/2014 12:00 AM	6,189.3	6,189.8		6,188.6
3/1/2014 12:00 AM	4/1/2014 12:00 AM	6,188.4	6,188.8		6,187.8
4/1/2014 12:00 AM	5/1/2014 12:00 AM	6,188.9	6,189.4		6,188.1
5/1/2014 12:00 AM	6/1/2014 12:00 AM	6,188.5	6,189.1		6,187.8
6/1/2014 12:00 AM	7/1/2014 12:00 AM	6,187.2	6,188.0		6,187.1
7/1/2014 12:00 AM	8/1/2014 12:00 AM	6,185.6	6,186.7		6,185.9
8/1/2014 12:00 AM	9/1/2014 12:00 AM	6,183.9	6,184.2		6,183.5
9/1/2014 12:00 AM	10/1/2014 12:00 AM	6,181.8	6,181.3		6,181.0
10/1/2014 12:00 AM	11/1/2014 12:00 AM	6,181.7	6,181.3		6,181.3
11/1/2014 12:00 AM	12/1/2014 12:00 AM	6,185.9	6,187.1		6,186.7
12/1/2014 12:00 AM	1/1/2015 12:00 AM	6,188.5	6,189.2		6,188.5
Annual Maximum:		6,189.3	6,189.8		6,188.6

SVPSD - ANNUAL WATER SYSTEM REPORT



REPORTING PERIOD
1/1/2014 12:00 AM
1/1/2015 12:00 AM



SVPSD - ANNUAL WATER SYSTEM REPORT



REPORTING PERIOD	
1/1/2014 12:00 AM	
1/1/2015 12:00 AM	

TANKS - AVERAGE TANK LEVEL (FT)

Monthly Report Periods		West Tank	East Tank	Zone 3 Tank
1/1/2014 12:00 AM	2/1/2014 12:00 AM	36.3	26.0	13.0
2/1/2014 12:00 AM	3/1/2014 12:00 AM	36.2	26.0	13.0
3/1/2014 12:00 AM	4/1/2014 12:00 AM	36.3	26.0	12.8
4/1/2014 12:00 AM	5/1/2014 12:00 AM	36.3	26.0	12.4
5/1/2014 12:00 AM	6/1/2014 12:00 AM	36.2	26.0	12.6
6/1/2014 12:00 AM	7/1/2014 12:00 AM	36.2	26.0	12.9
7/1/2014 12:00 AM	8/1/2014 12:00 AM	36.0	26.1	12.9
8/1/2014 12:00 AM	9/1/2014 12:00 AM	36.1	26.1	12.9
9/1/2014 12:00 AM	10/1/2014 12:00 AM	36.1	26.1	12.9
10/1/2014 12:00 AM	11/1/2014 12:00 AM	36.2	26.1	12.9
11/1/2014 12:00 AM	12/1/2014 12:00 AM	36.2	26.0	12.7
12/1/2014 12:00 AM	1/1/2015 12:00 AM	36.3	26.1	12.8

TANKS - AVERAGE STORAGE (KGAL)

Monthly Report Periods		West Tank	East Tank	Zone 3 Tank
1/1/2014 12:00 AM	2/1/2014 12:00 AM	1,044	446	110
2/1/2014 12:00 AM	3/1/2014 12:00 AM	1,041	446	110
3/1/2014 12:00 AM	4/1/2014 12:00 AM	1,045	446	109
4/1/2014 12:00 AM	5/1/2014 12:00 AM	1,044	446	106
5/1/2014 12:00 AM	6/1/2014 12:00 AM	1,041	446	107
6/1/2014 12:00 AM	7/1/2014 12:00 AM	1,041	446	109
7/1/2014 12:00 AM	8/1/2014 12:00 AM	1,037	447	109
8/1/2014 12:00 AM	9/1/2014 12:00 AM	1,039	447	110
9/1/2014 12:00 AM	10/1/2014 12:00 AM	1,040	447	110
10/1/2014 12:00 AM	11/1/2014 12:00 AM	1,041	446	109
11/1/2014 12:00 AM	12/1/2014 12:00 AM	1,042	446	107
12/1/2014 12:00 AM	1/1/2015 12:00 AM	1,044	446	108

SVPSD - ANNUAL WATER SYSTEM REPORT



REPORTING PERIOD
1/1/2014 12:00 AM
1/1/2015 12:00 AM

PUMPS - MONTHLY STARTS

Monthly Report Periods		Well 1R	Well 2	Well 3	Well 5	East Booster	Zone 3 Booster 1	Zone 3 Booster 2	Horizontal Well
1/1/2014 12:00 AM	2/1/2014 12:00 AM	5	50	0	41	42	4	3	41
2/1/2014 12:00 AM	3/1/2014 12:00 AM	0	43	0	53	38	3	4	38
3/1/2014 12:00 AM	4/1/2014 12:00 AM	4	66	5	61	36	2	2	40
4/1/2014 12:00 AM	5/1/2014 12:00 AM	24	62	1	49	38	4	2	38
5/1/2014 12:00 AM	6/1/2014 12:00 AM	63	60	0	54	53	11	11	51
6/1/2014 12:00 AM	7/1/2014 12:00 AM	91	86	0	74	59	14	15	61
7/1/2014 12:00 AM	8/1/2014 12:00 AM	64	80	4	74	55	15	15	56
8/1/2014 12:00 AM	9/1/2014 12:00 AM	6	69	63	64	32	13	13	32
9/1/2014 12:00 AM	10/1/2014 12:00 AM	65	63	63	61	32	13	13	34
10/1/2014 12:00 AM	11/1/2014 12:00 AM	48	48	48	48	31	13	14	31
11/1/2014 12:00 AM	12/1/2014 12:00 AM	32	32	33	31	22	2	1	22
12/1/2014 12:00 AM	1/1/2015 12:00 AM	52	50	47	47	39	2	2	39
ANNUAL TOTALS:		454	709	264	657	477	96	95	483

PUMPS - MONTHLY RUNTIMES (HRS)

Monthly Report Periods		Well 1R	Well 2	Well 3	Well 5	East Booster	Zone 3 Booster 1	Zone 3 Booster 2	Horizontal Well
1/1/2014 12:00 AM	2/1/2014 12:00 AM	8	155	0	166	107	9	8	106
2/1/2014 12:00 AM	3/1/2014 12:00 AM	0	182	0	180	98	6	9	99
3/1/2014 12:00 AM	4/1/2014 12:00 AM	0	260	3	243	89	5	5	191
4/1/2014 12:00 AM	5/1/2014 12:00 AM	39	126	1	128	104	9	5	32
5/1/2014 12:00 AM	6/1/2014 12:00 AM	123	123	0	121	114	27	31	108
6/1/2014 12:00 AM	7/1/2014 12:00 AM	206	199	0	201	178	52	64	236
7/1/2014 12:00 AM	8/1/2014 12:00 AM	161	256	3	262	185	81	80	328
8/1/2014 12:00 AM	9/1/2014 12:00 AM	1	264	225	264	154	64	57	691
9/1/2014 12:00 AM	10/1/2014 12:00 AM	142	152	152	158	137	58	56	538
10/1/2014 12:00 AM	11/1/2014 12:00 AM	109	109	109	109	104	67	68	446
11/1/2014 12:00 AM	12/1/2014 12:00 AM	61	61	62	61	51	6	4	51
12/1/2014 12:00 AM	1/1/2015 12:00 AM	83	98	87	98	98	7	6	108
ANNUAL TOTALS:		933	1,985	642	1,991	1,419	391	393	2,934

SVPSD - ANNUAL WASTEWATER SYSTEM REPORT



REPORTING PERIOD
1/1/2014 12:00 AM
1/1/2015 12:00 AM

FLOWMETERS - MONTHLY TOTALS (Mgal)

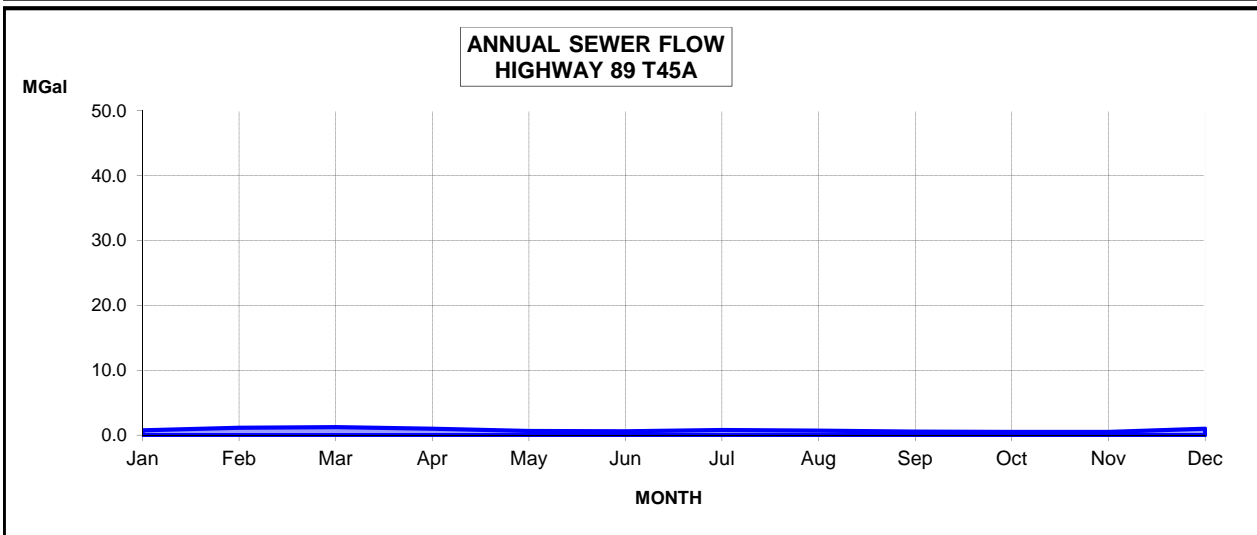
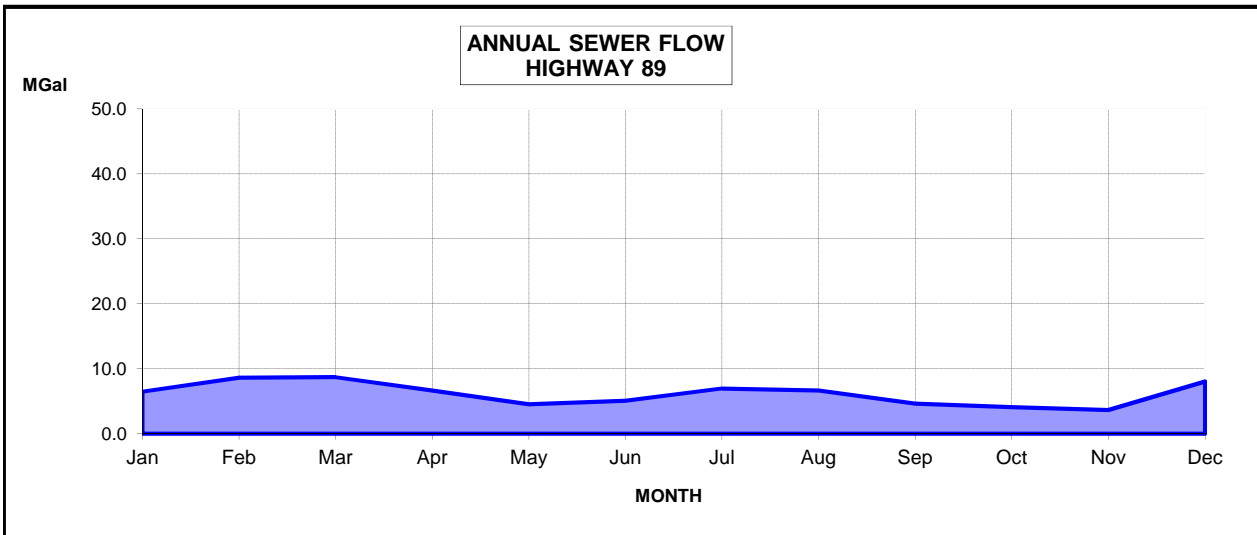
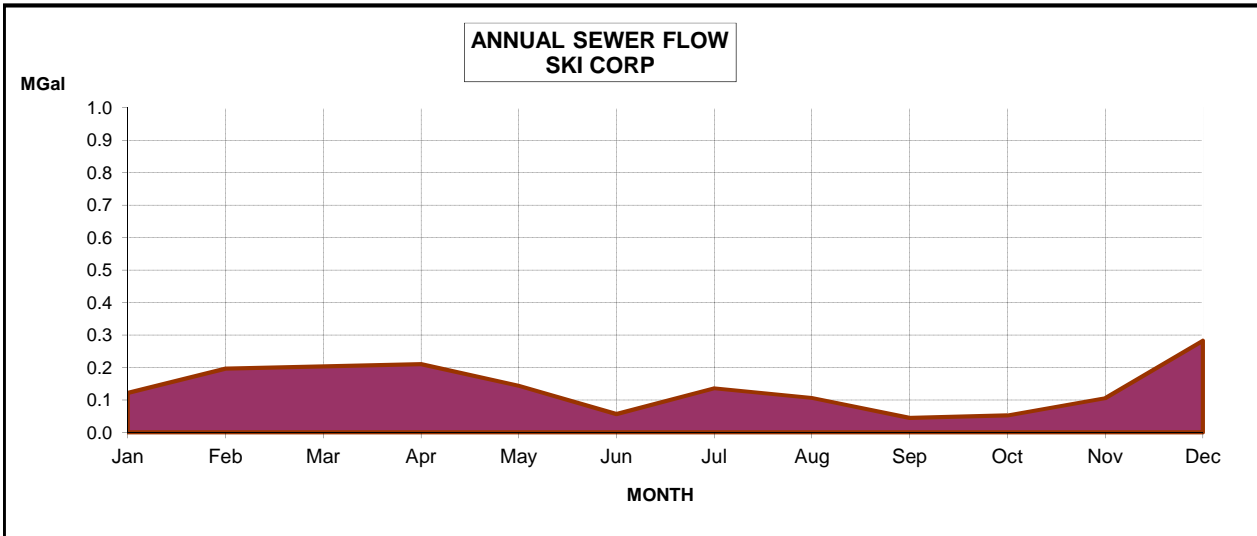
Monthly Report Periods		SVRE	Highway 89	Highway 89 T45A
1/1/2014 12:00 AM	2/1/2014 12:00 AM	0.121	6.496	0.764
2/1/2014 12:00 AM	3/1/2014 12:00 AM	0.197	8.634	1.162
3/1/2014 12:00 AM	4/1/2014 12:00 AM	0.203	8.711	1.218
4/1/2014 12:00 AM	5/1/2014 12:00 AM	0.211	6.650	0.982
5/1/2014 12:00 AM	6/1/2014 12:00 AM	0.144	4.562	0.640
6/1/2014 12:00 AM	7/1/2014 12:00 AM	0.057	5.074	0.577
7/1/2014 12:00 AM	8/1/2014 12:00 AM	0.136	6.984	0.818
8/1/2014 12:00 AM	9/1/2014 12:00 AM	0.106	6.666	0.717
9/1/2014 12:00 AM	10/1/2014 12:00 AM	0.045	4.665	0.560
10/1/2014 12:00 AM	11/1/2014 12:00 AM	0.052	4.125	0.518
11/1/2014 12:00 AM	12/1/2014 12:00 AM	0.105	3.652	0.523
12/1/2014 12:00 AM	1/1/2015 12:00 AM	0.283	8.055	1.006
Annual Site Totals (Mgal):		1.659	74.271	9.484

Note: SVRE meter was off line June through September and the flow data was averaged from the last 3 years usage for these months.

SVPSD - ANNUAL WASTEWATER SYSTEM REPORT



REPORTING PERIOD
1/1/2014 12:00 AM
1/1/2015 12:00 AM



2015 Annual Report on District Fleet

It is management's goal at the Squaw Valley Public Service District to have a robust emergency ready fleet capable of supporting a high level of maintenance and repair of the water and sewer infrastructure in Squaw Valley. Annual review of the fleet is integral to supporting this goal and provides a tool for making budgetary decisions for both the annual budget and the 10 year CIP.

The overall age of the District fleet has improved slightly due to replacement of the ¾ ton service truck and is now 12.3 years. As shown in the attached graphic maintenance costs have improved slightly as well. Manpower costs are up due to deferred maintenance backlog and the available labor pool catching things up. There are two vehicles exceeding 15 years of age to be considered for replacement in 2015. The 1997 Ford Explorer is 18 years old and is pushing 120,000 miles. Although the vehicle is in good condition it is underutilized and has a value that will be easily exceeded by any major repair; the backhoe is passing the 21 year mark.

The attached spreadsheet summarizes District vehicle and equipment by year, model, mileage, age, replacement schedule, and remaining service life. Additionally there are maintenance and cost projections for the coming budget year. Maintenance costs to date are on track with 2014 budget projections.

As management looks forward to the next few years of fleet management there are vehicles and equipment that should be analyzed and considered for replacement as follows:

1997 Ford Explorer: This vehicle is 18 years old and exceeds 118,000 miles. The vehicle began having major problems in 2013 with replacement of the heater control box, ball joints and 4WD shaft pinion seal. Internet research shows that timing chain failure is a common problem. The present value of the vehicle according to Kelly Blue Book is as low as \$520. A new vehicle of the same class will get up to 10 MPG increase in fuel economy, estimated to save the District \$650 annually. This vehicle is recommended for replacement as soon as possible.

2003 Ford F250 (TV Truck): Replaced in 2014

1994 JCB Backhoe: The backhoe is 21 years old with 2,300 hours. Although the equipment was envisioned to last more than 20 years, I am projecting some potentially serious problems if replacement is delayed. There is a leak in the valve body that was cost estimated by both JCB and John Deere to be about \$6,000 to repair. There have been failures of the front spindles which are likely to reoccur and there is a problem developing with the rear drive axle; which is

loose and making noise. The JCB will need a new set of front tires this year. The rear tires were replaced in 2014.

The JCB dealer in Reno closed their doors several years ago and their mobile mechanic now comes from Sacramento making even minor repairs problematic; obsolescence due to age means parts must come from overseas or Canada. The JCB is a lightweight and low power alternative that cost far less than comparable equipment when purchased. The Utility Department would benefit from a heavier and slightly more powerful replacement such as a John Deere 410 or CAT 416. I am recommending replacement of this vehicle for the 2015 budget cycle.

1999 Ford F250 Utility Truck: This vehicle is 16 years old with 50,000 miles. This vehicle is in good condition with no known problems. I am recommending the service be extended and replacement scheduled in 2016.

Replacement Timeline: Attached is a 10 year timeline for vehicle and equipment replacement with estimated costs.

Recommendation:

I am recommending the District replace the 1997 Ford Explorer with a full size SUV that is capable of transporting maintenance personnel to local and out of town training while regularly transporting staff and consultants yet capable of carrying tools and equipment for intermittent service needs. Further recommendations will be forthcoming after research of price and vehicle specifications is completed. It is further recommended the District consider purchase of an additional ½ ton pickup near term. Current staffing finds the vehicle inventory short on a regular basis.

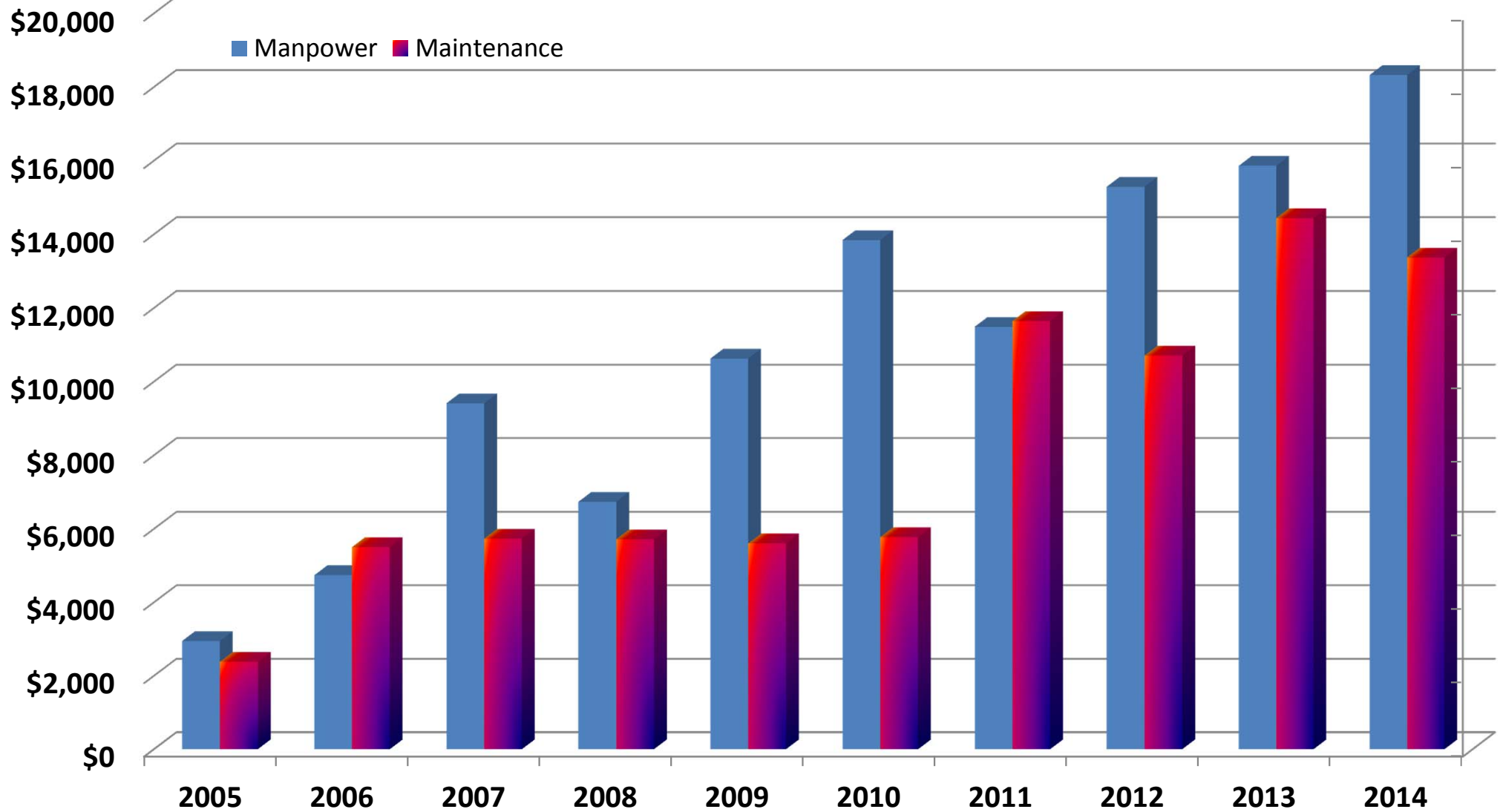
The JCB Backhoe presents an economic issue due to the high cost; I am recommending the District investigate the concept of a lease to own option similar to the recent snow blower purchase. This would allow the Utility Department to have the equipment on site in case of a failure like the S-Turn repair with minimal impact on the Asset Replacement Fund while the fund is recovering, meanwhile avoiding high equipment repair costs.

Annual Report on District Fleet

2015

Vehicle/Equipment	Mileage Hours	Age	Replacement Schedule	Service Life	Annual Use	Maintenance Performed	2014 2015	Maintenance Due	2015 2016
2008 Ford 1 Ton 4x4 Flat	26,314	7	15	8	4,050	Annual Service	\$119	Annual Service	\$125
						New Tires	\$1,221		
1999 Ford Utility 4x4	49,865	16	15	-1	4,970	Annual Service	\$94	Annual Service	\$125
2014 Dodge Ram 4x4	16,219	1	15	14	16,219	Annual Service	\$119	Annual Service	\$125
						Fix Steering/New Tires/Mat's	\$1,203		
1997 Ford Explorer	117,578	18	15	-3	3,505	2x Annual Service	\$101	2x Annual Service	\$125
2014 F-150 4x4	2,676	1	15	14	2,676	2x Annual Service	\$94	2x Annual Service	\$125
2008 F-750 Dump Truck	6,647	7	30	23	1,474	Annual Service	\$94	Annual Service	\$125
						Tow/Repair	\$577		
1998 JD 444H Loader	3,187	17	30	13	194	Annual Service	\$94	Annual Service	\$125
1994 JCB Backhoe	2,996	21	30	9	215	Annual Service	\$94	Annual Service	\$125
						Tow/Repair, New Back Tires	\$3,805	Front Tire Replacement	\$2,000
1998 JD Air Compressor	353.5	17	20	3	20	Annual Service	\$94	Annual Service	\$125
2007 New Holland Westa Sno Blower	349	8	30	22	12	Annual Service	\$94	Annual Service	\$125
			20	12		Battery	\$293		
2009 Vac-Con Hydro-Vac	6,541	6	30	24	654	Annual Service	\$94	Annual Service	\$125
Power Take Off (PTO)	215.9	6	30	24	58	Vehicle Equipment	\$261	Replace Hydraulic Filters	\$400
2009 Duetz Rear Engine	427	6	30	24	88	Annual Service	\$331	Annual Service	\$125
6" Trash Pump (2000)	36.8	15	30	15	3	Annual Service	\$94	Annual Service	\$125
2010 Prowler Easement	27.9	5	20	15	1	Annual Service	\$94	Annual Service	\$125
						Battery	\$44		
Well House Generator (1993)	209.9	22	40	18	5	Annual Service	\$94	Annual Service	\$125
1810 Generator (1991)	765.5	24	40	16	2	Annual Service	\$94	Annual Service	\$125
305 Generator (2004)	138.5	11	40	29	3	Annual Service	\$94	Annual Service	\$125
Equipment/Old Vehicles						Ranger/TV/Candycom	\$686	Equipment	\$200
Miscellaneous Shop Supplies						Rags,Cleaning supp. Ect.	\$150	Rags, Cleaning Supp. Ect.	\$600
Total	Fleet Ave.	12.3					\$10,132		\$ 5,325

Vehicle Manpower and Maintenance Costs



Vehicle and Equipment Replacement Timeline Ten Year CIP

Vehicle	Year	Cost
1998 Ford Ranger	2014	\$25,000 (complete)
1997 Ford Explorer	2015	\$32,000
1994 JCB Backhoe	2015	\$85,000
Add Utility Truck	2016	\$26,000
1999 F-250 Utility	2017	\$32,000
Vac-Con Rear Engine Retrofit	2018	\$12,000
1998 JD 444H Loader	2019	\$100,000
1998 JD Air Compressor	2020	\$18,000
1810 Generator (1991)	2021	\$60,000
Well House Generator (1993)	2023	\$80,000
		Total \$470,000

SVPSD Operations Department 10 Year Fuel Usage Trend

