

# SURFSIDE WATER DEPARTMENT

## WATER SYSTEM MANAGER MONTHLY REPORT

REPORT DATE:

February 5, 2018

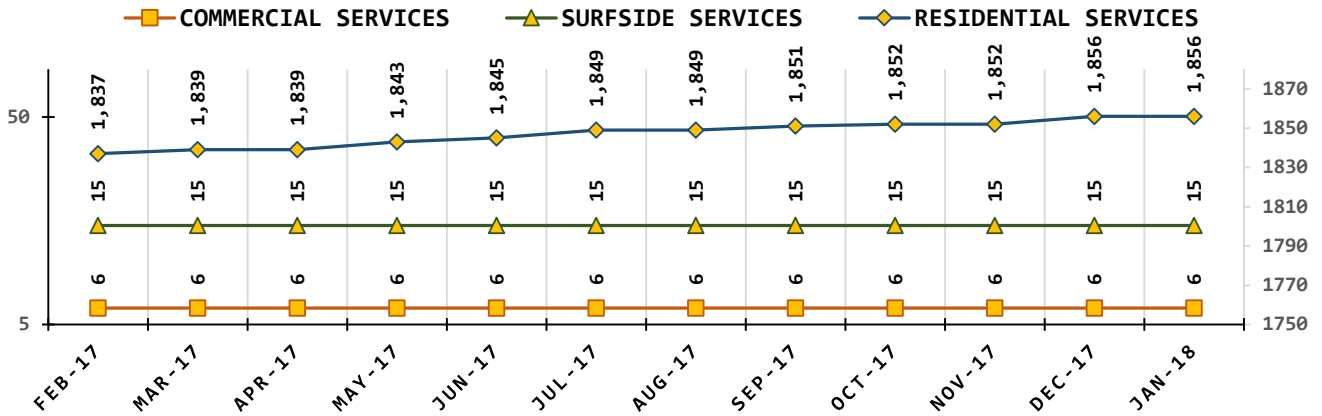
REPORT ON ACTIVITY PERIOD:

12/29/17 THRU 1/31/18

**WATER USERS REPORT:**

TOTAL RESIDENTIAL WATER SERVICES (AT END OF ACTIVITY PERIOD)	1,856
TOTAL COMMERCIAL WATER SERVICES (AT END OF ACTIVITY PERIOD)	6
TOTAL SURFSIDE WATER SERVICES (AT END OF ACTIVITY PERIOD)	15

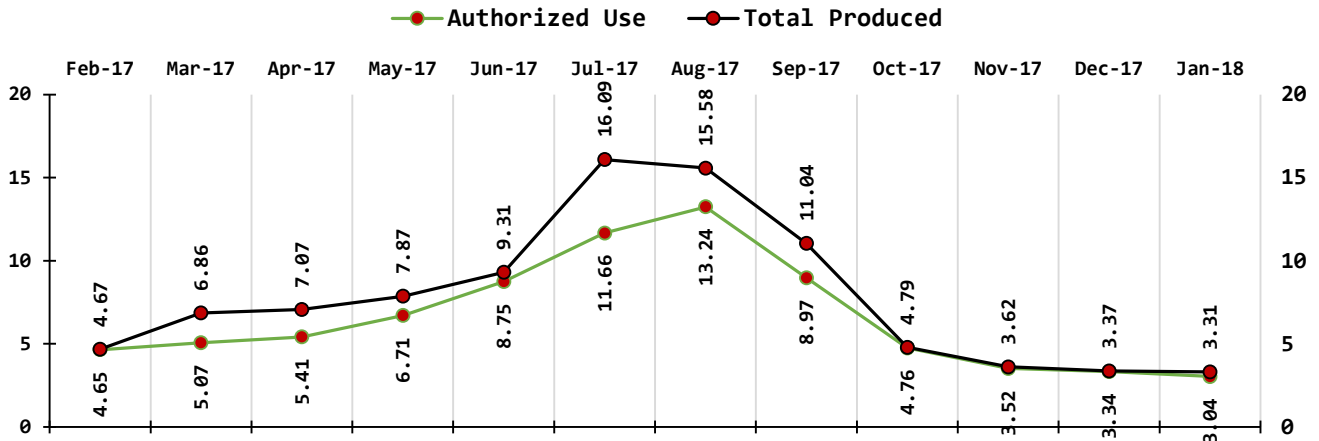
### SURFSIDE WATER SERVICES



**WATER USE EFFICIENCY REPORT:**

TOTAL WATER PRODUCED IN MILLIONS OF GALLONS (2017)	3.31
TOTAL AUTHORIZED WATER USE IN MILLIONS OF GALLONS (2017)	3.04
TOTAL DISTRIBUTION SYSTEM LEAKAGE IN PERCENT (2017)	8.2%

### WATER USE EFFICIENCY CHART



<b>TREATMENT PLANT REPORT:</b>	
RAW WATER IRON (MG/L) (ANNUAL AVERAGE)(MCL 0.3 mg/L)	0.17
FINISHED WATER IRON (MG/L) (ANNUAL AVERAGE)(MCL 0.3 mg/L)	0.01
RAW WATER MANGANESE (MG/L) (ANNUAL AVERAGE)(MCL 0.05 mg/L)	0.109
FINISHED WATER MANGANESE (MG/L) (ANNUAL AVERAGE)(MCL 0.05 mg/L)	0.025
RAW WATER COLOR (CU) (ANNUAL AVERAGE) (MCL 15 CU)	42
FINISHED WATER COLOR (CU) (ANNUAL AVERAGE)(MCL 15 CU)	6
<b>DISINFECTION BYPRODUCTS REPORT:</b>	
SITE 1 - TTHM (UG/L) (RUNNING ANNUAL AVERAGE)(MCL 80 ug/L)	60.0
SITE 1 - HAA5 (UG/L) (RUNNING ANNUAL AVERAGE)(MCL 60 ug/L)	11.4
SITE 2 - TTHM (UG/L) (RUNNING ANNUAL AVERAGE)(MCL 80 ug/L)	70.9
SITE 2 - HAA5 (UG/L) (RUNNING ANNUAL AVERAGE)(MCL 60 ug/L)	1.3
<b>MICROBIAL REPORT:</b>	
ROUTINE COLIFORM BACTERIA SAMPLES (2018)	1
REPEAT COLIFORM BACTERIA SAMPLES (2018)	0
GROUNDWATER RULE COLIFORM BACTERIA SAMPLES (2018)	0
INVESTIGATIVE COLIFORM BACTERIA SAMPLES (2018)	2
CONSTRUCTION COLIFORM BACTERIA SAMPLES (2018)	1
<b>OPERATIONS REPORT:</b>	
CUSTOMER SERVICE CALLS (2018)	11
WATER MAIN LOCATES (2018)	13
DISTRIBUTION LEAK REPAIRS (2018)	0
WATER MAIN BREAKS (2018)	0
NEW SERVICES INSTALLED (2018)	0
EXISTING SERVICES DECOMMISSIONED (2018)	0
<b>CROSS CONNECTION REPORT:</b>	
COMPLIANCE LETTERS SENT OUT (2018)	5
CROSS CONNECTION INVESTIGATIONS (2018)	8
CROSS CONNECTION ONSITE SURVEY (2018)	0
BACKFLOW ASSEMBLIES INSTALLED (2018)	1
BACKFLOW ASSEMBLIES TESTED (2018)	0
BACKFLOW ASSEMBLIES REPLACED (2018)	0
MEMBERS WHO HAVE NOT COMPLETED A WATER USE QUESTIONNAIRE (2018)	9
<b>WATER MAIN REPLACEMENT REPORT:</b>	
LINEAL FEET OF WATER MAIN REPLACED (2018)	680
WATER MAIN VALVES INSTALLED/REPLACED (2018)	4
FIRE HYDRANTS INSTALLED/REPLACED (2018)	0
LINEAL FEET OF RIGHT-OF-WAY RESTORED (2018)	0
<b>MEMBER WATER LEAKS REPORT:</b>	
POTENTIAL MEMBER LEAK LETTERS MAILED (2018)	24
POTENTIAL MEMBER LEAK INVESTIGATIONS PERFORMED (2018)	2
MEMBER LEAKS RESOLVED (2018)	15
MEMBER LEAKS UNRESOLVED (2018)	39

**TOP WATER USERS REPORT:**

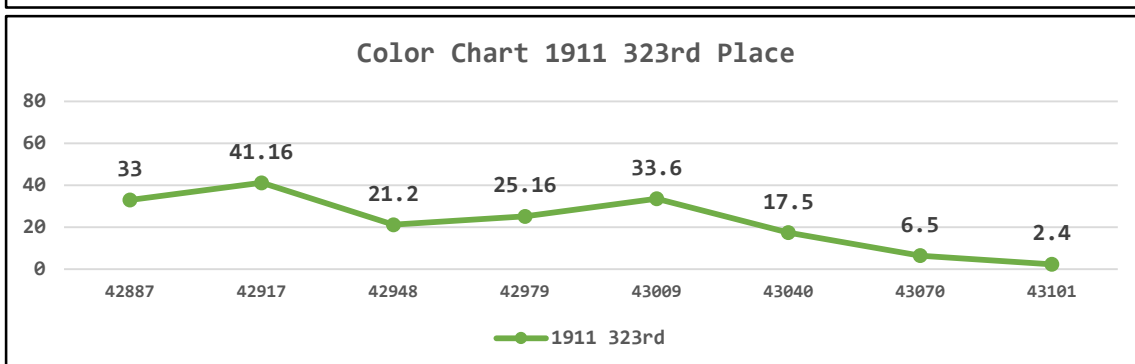
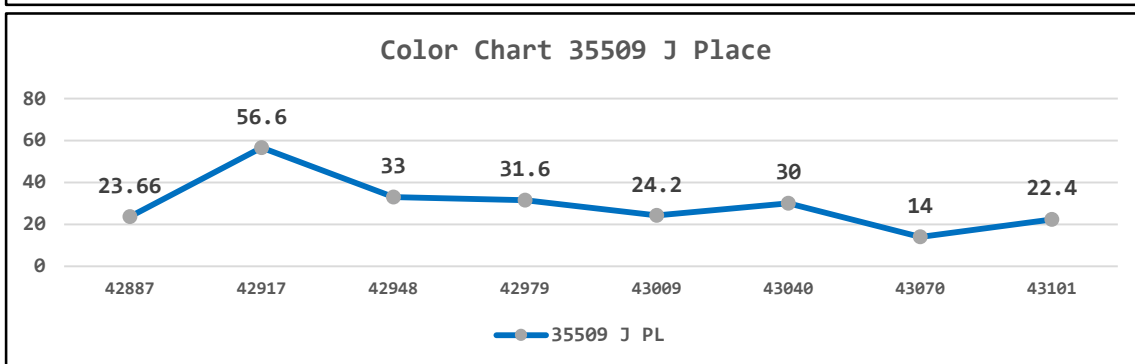
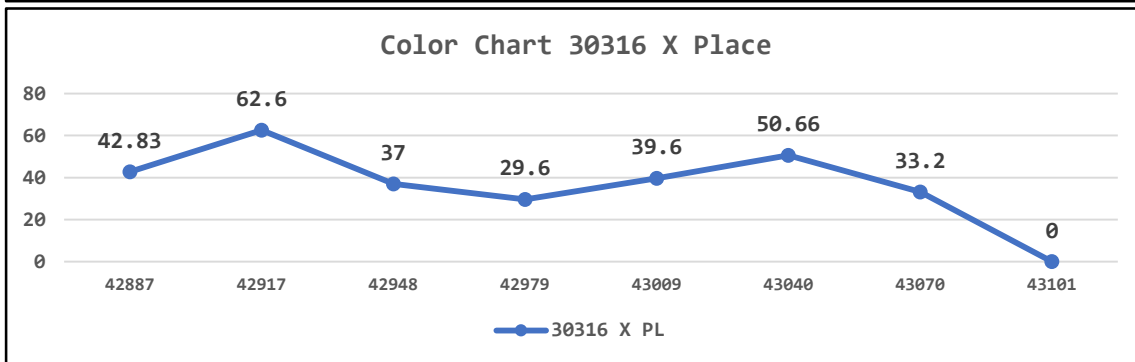
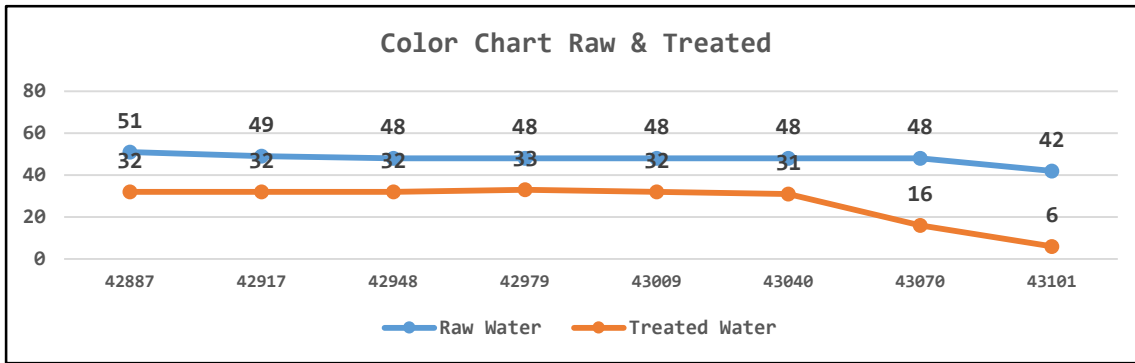
PREVIOUS READ DATE:		12/29/2017		CURRENT READ DATE:		1/31/2018	
CUBIC FEET	GALLONS	GALLONS PER DAY	COMMENTS				
21,375	159,896	4,845	No Leak 3-7 Days				
13,451	100,620	3,049	Continuous Leak 35 Days				
8,794	65,784	1,993	Intermittent Leak 35 Days				
4,540	33,962	1,029					
3,747	28,030	849	No Leak 3-7 Days				
3,296	24,656	747					
2,947	22,045	668	Continuous Leak 35 Days				
2,856	21,364	647	No Leak 15-21 Days				
2,782	20,811	631	Continuous Leak 35 Days				
2,299	17,198	521	Continuous Leak 35 Days				
2,196	16,427	498	No Leak 3-7 Days				
1,996	14,931	452	Continuous Leak 35 Days				
1,809	13,532	410	average use for a 4 person home				
1,711	12,799	388	average use for a 4 person home				
1,684	12,597	382	average use for a 4 person home				
1,516	11,340	344	average use for a 3 person home				
1,510	11,296	342	average use for a 3 person home				
1,429	10,690	324	average use for a 3 person home				
1,375	10,286	312	average use for a 3 person home				
1,304	9,755	296	average use for a 3 person home				
1,296	9,695	294	average use for a 3 person home				
1,261	9,433	286	average use for a 3 person home				
1,256	9,396	285	average use for a 3 person home				
1,252	9,366	284	average use for a 3 person home				
1,248	9,336	283	average use for a 3 person home				
TOTAL	665,243	GALLONS OF WATER					
IS EQUAL TO	11.4%	OF THE TOTAL METERED RESIDENTIAL WATER					
IS USED BY	1.4%	OF THE RESIDENTIAL METERED SERVICES					

**WATER SYSTEM OPERATIONS COMMENTS:** (APRIL GARCIA, TREATMENT PLANT OPERATOR)

**BOOSTER PUMP REPLACEMENT PROJECT:**

The two 15 HP VFD pumps were brought online January 26th 2018. The Automation Group (TAG) designed the variable frequency drives (VFD) and installed them in December. They also reprogrammed parts of our existing PLC to run the new VFD. Currently the water system pressure was set at 53 Pounds per Square Inch (PSI). The VFD keep the pressure within 2 or 3 psi of that setting as the water demand goes up and down. The two pumps are set to switch lead and lag the first of every month. The PLC will have a minimum pump rotation speed setting to cycle the pumps off if demand falls below 40 GPM. The pumps can maintain a low water flow 40 Gallons per Minute (GPM) and a high water flow of 500 GPM at 53 PSI. Anything below 40 GPM the pumps will cycle on and off while alternating lead and lag. The 2 pumps originally were run through the 2" bypass line until they had time to perform. On Wednesday, January 31st we disabled the 6" pressure regulating and sustaining valve, manufactured by CAL-VAL™, by closing the sensing lines and bleeding off the bonnet, and began supplying the distribution system through the 6" line. The 2 new 40 HP booster pumps are being installed. The new 40 HP pumps did not fit in the existing manifold. In order to properly align the new 40 HP pumps to the existing manifold we ordered special fittings fabricated. When those fittings are complete and installed we will put the new 40 HP pumps on line.

**CARBON TREATMENT PLANT:** The carbon filters are currently giving us dramatically lower color and iron levels in the reservoirs. Some members have complained of strong chlorine taste and odor. This is caused by the low chlorine demand of the water after carbon treatment. We are adjusting chemical dosing at the plant to coincide with the improved water quality. Without organics to "eat" the chlorine it will take a little time for the chlorine levels to come down in the system. Three members have complained of carbon in their water, particularly in the toilet tanks. It is most likely that iron and manganese is being dissolved by the low organic content water and creating blackish or reddish-brown film, however we cannot dogmatically rule out carbon fines in the water and have asked Calgon and the engineer to help us determine if fines are a possibility. If fines are the culprit they are harmless and will work themselves out of the system in a short time. (See Color Charts Below)



PLANT OPERATIONS: Justin spent time training Charles on daily treatment plant data collection, treatment plant water sampling, and distribution system water sampling.

**CROSS CONNECTION CONTROL COMMENTS:** (APRIL GARCIA, CROSS CONNECTION CONTROL COORDINATOR)

6 members have cross connection hazards pending removal  
4 members have cross connection hazards pending investigation  
6 members have cross connection hazards pending installation of a backflow prevention assembly  
9 water services are locked off for failure to return a Water Use Questionnaire.

**WATER MAIN REPLACEMENT (WMR) COMMENTS:**(GILBERT GONZALEZ, RESPONSIBLE OPERATOR IN CHARGE)

All water main replacement in January 2018 was on 324th Place between K Place and 321st Place. No WMR was completed the last two weeks of January. The crew was busy on the Booster Pump Replacement Project and other preventative maintenance work.

**OYSTERVILLE LOOP PROJECT:** (Bill Neal, Water System Manager)

All of the easement agreements have been sent to the Surfside members who own Surfcrest Condominiums. I met with one member who has agreed to be the liaison between Surfcrest Condominiums #1 and Surfside in getting the easement agreements approved. We discussed concerns the members have and I expect a written response soon. I have not met with anyone representing Surfcrest Condominiums #2 yet. I expect to meet with them in the near future.



WMR Work on 234th Place