



COUNCIL MONTHLY REPORT

DEPARTMENT: PUBLIC WORKS

MONTH: JULY 2016

PUBLIC WORKS

During July, Public Works staff responded to 122 requests for service submitted through the City's E-Gov software. Of those requests for service 6% were generated from outside City Hall.

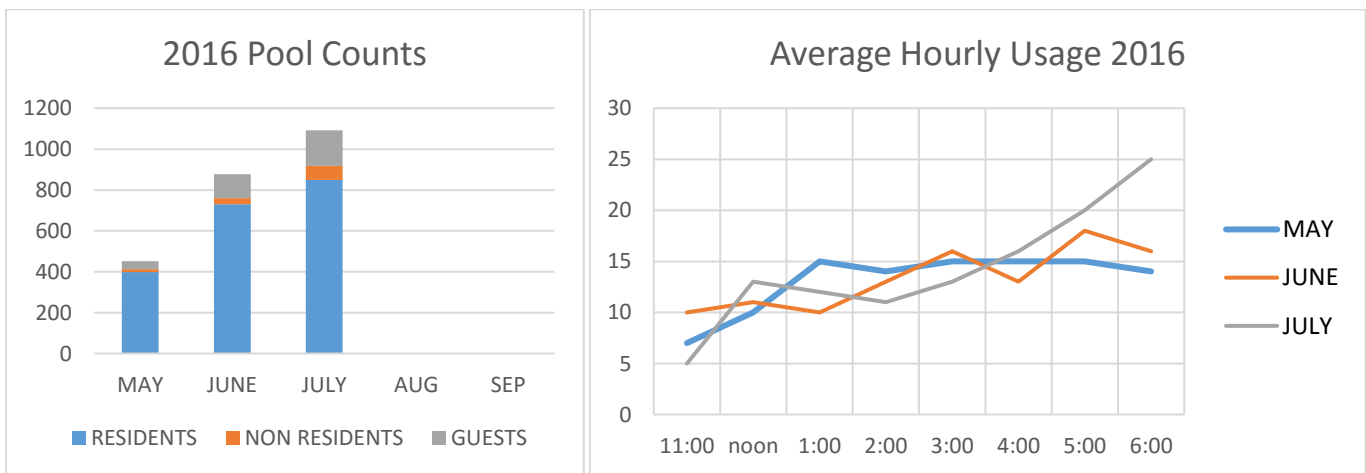
Public Works staff ran the street sweeper three times in July. The table below records the debris recovered, diesel used, hours swept, and the volume of water used.

Date Swept	Diesel Used (gallons)	Hours Swept	Collected Amount (cubic yards)	Water Used (gallons)
7/7/2016	10	4	4	150
7/14/2016			**Maintenance**	
7/21/2016	12	3	4	150
7/28/2016	9	3	4	150
JULY	31	10	12	450

In July, there were four cuts of the irrigated areas (those areas of the City with sprinkler systems), two cuts of the non-irrigated areas and one cut to the I-45 Feeder. Once a week Brickman's staff checks these areas and picks up any debris.

Public Works staff performs two checks of the City Parks during the weekdays and once on Saturday and Sunday. During the morning and afternoon checks, trash cans are emptied if needed, bathrooms are checked for cleanliness, and a general inspection is performed.

The pool began its regular season hours on June 3rd. Pool data is recorded in the following charts.



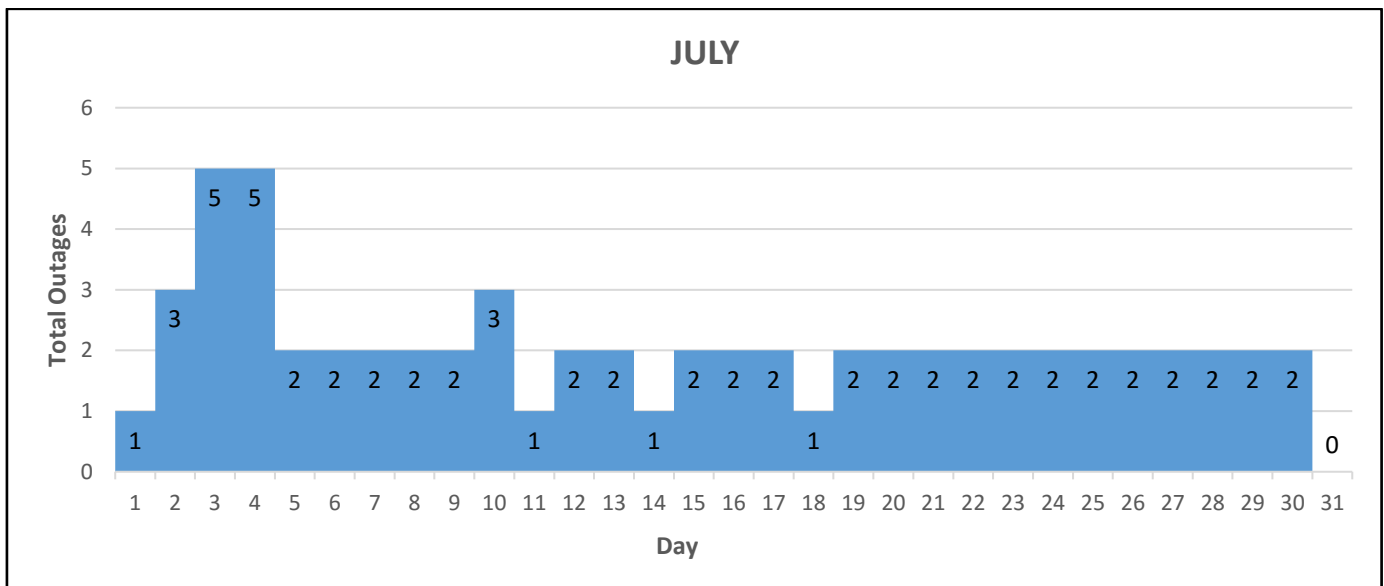
Lifeguard perform regular tests of the pool to ensure that the water is safe for swimmers. On July 8th the pool had to be cleared of swimmers to allow chlorine levels to rise for two hours. The pool director believes it was a combination of high heat (97°), full sunlight, and heavy bather load. Chlorine tabs were added to help boost the chlorine levels.

Solar streetlights were monitored during the month for outages, battery replacements, maintenance issues, and testing. The batteries recovered are those that showed a failure upon first testing when removed from the solar light, but staff was able to perform a 16V boost and recover some of the lost capacity.

SOLAR STREETLIGHT DATA

Item Monitored	Quantity
Average number of lights out per day	2.1
Number of lights with battery change outs	2
Number of batteries tested	216
Number of battery replaced (failures)	2
Number of batteries recovered	0
Number of controllers replaced	0
Number of fixtures replaced	0
Number of solar panels replaced	0
Number of drivers replaced	0
Number of wiring issues	0

Light outages are recorded when either the light does not come on during the night or the light goes out sometime during the night. The chart below shows the number of street light outages per day for the month. This represents the total number of lights out each day and does not identify specifically which lights are out.

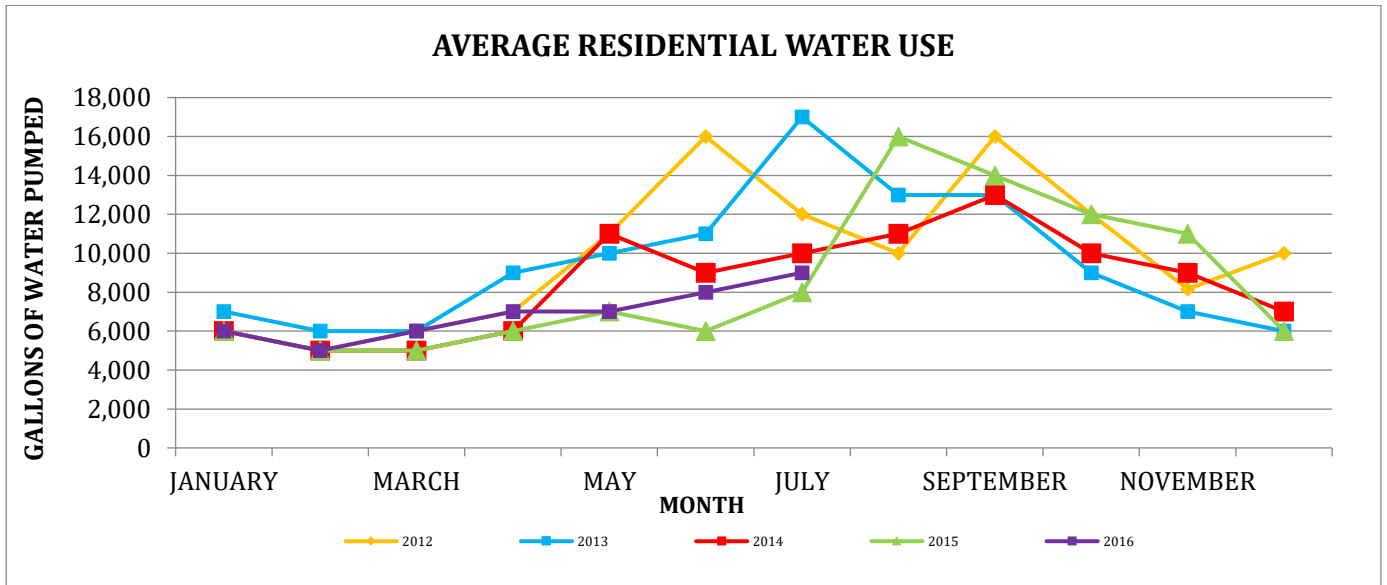


City staff is currently retesting all the batteries in the solar street lights. A preliminary test was performed with a voltmeter before the maintenance period ended in order to have results for the contractor on battery replacement. Since that time the city has purchased a battery tester recommended by the installing contractor (Texas Solar Resources) and is approximately halfway through the retesting process. Since the retesting began staff has discovered two additional defective batteries. City staff also found eight lights with tree branches encroaching on the solar panel and have been trimmed branches accordingly.

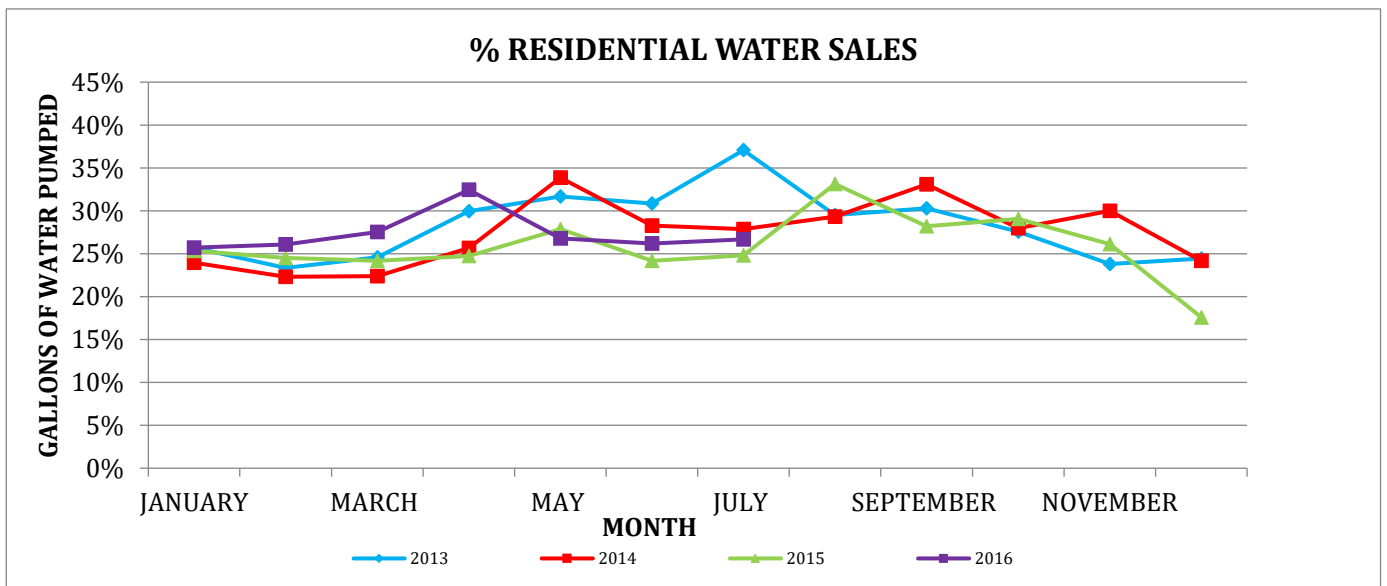
WATER & SEWER

Water and sewer data is reported on monthly reports as calendar months except for the average residential water use and the water loss data which are reported for the billing month as these data points are based on use data which is only available on a billing month cycle. Data reported with the utility billing report is reported as a billing month.

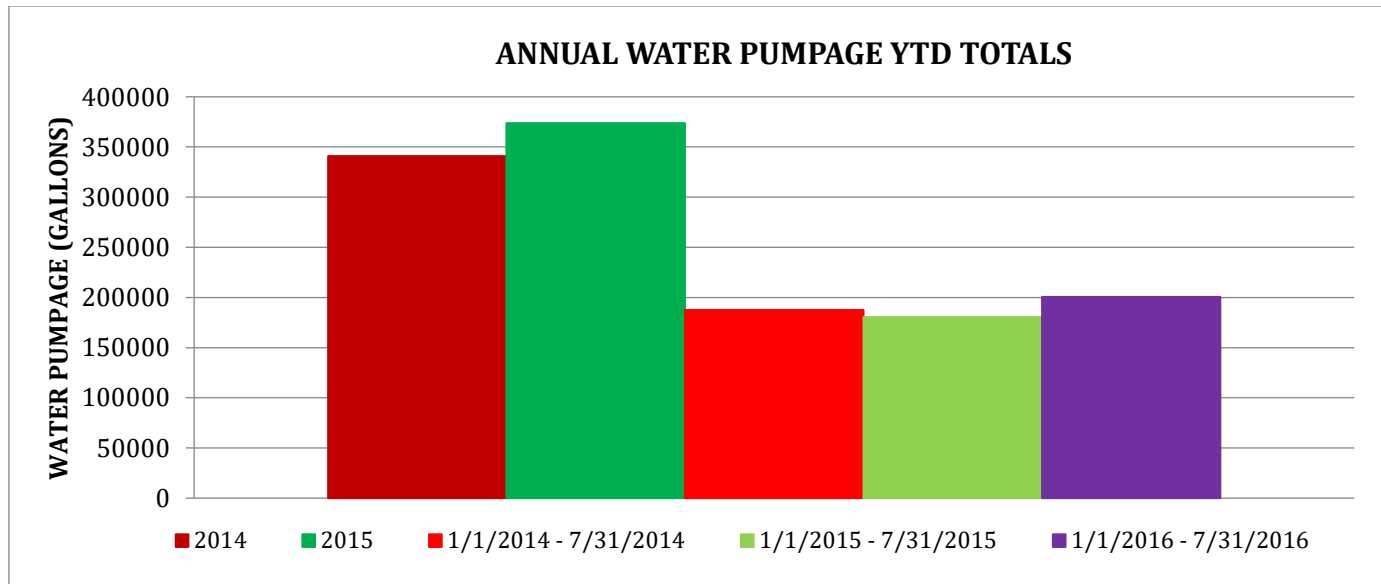
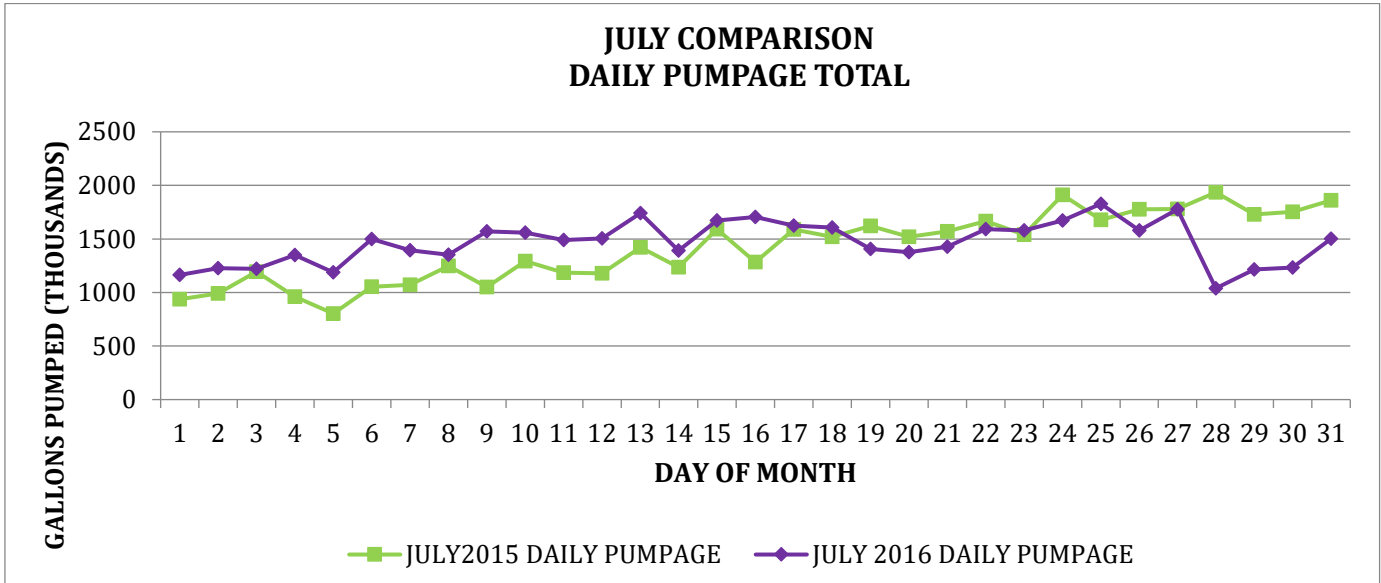
Groundwater production for the calendar month of July was approximately 45.47 million gallons with an average daily use of 1,467,000 gallons. The average residential water use for the billing month was 9,000 gallons. The next chart shows the average residential water use for each month compared to previous months.



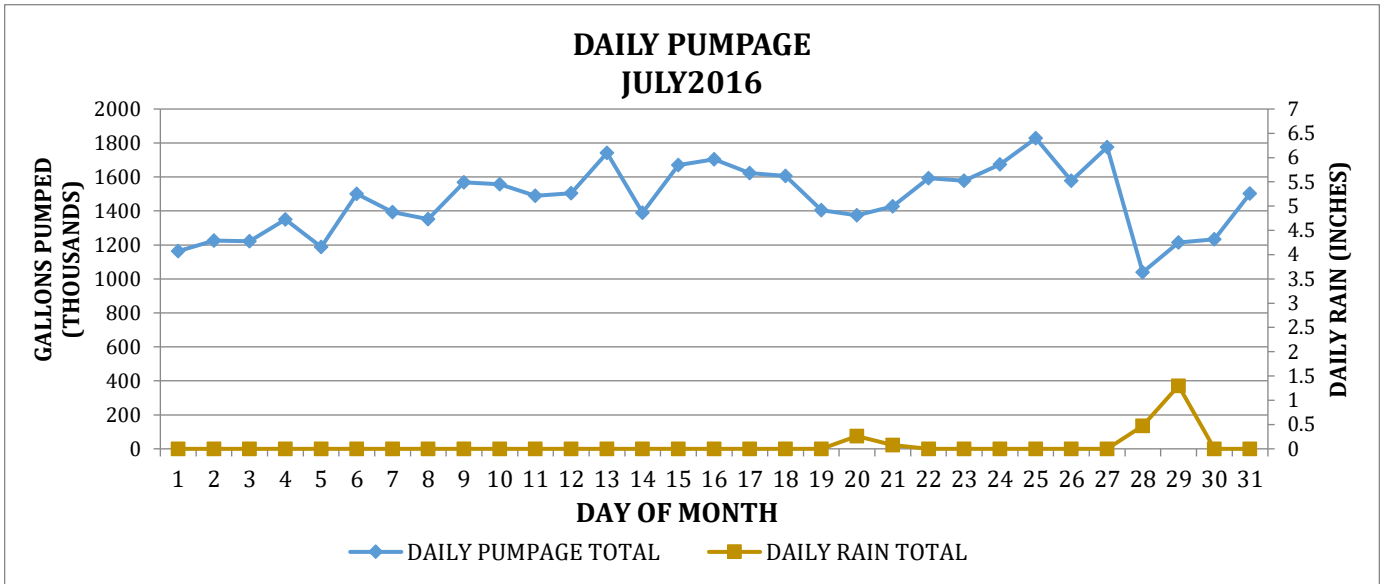
The chart below shows how much residential water sales have accounted for. In July 2015 residential water sales accounted for 24.82% of all water sales compared to 26.67% for the current month.



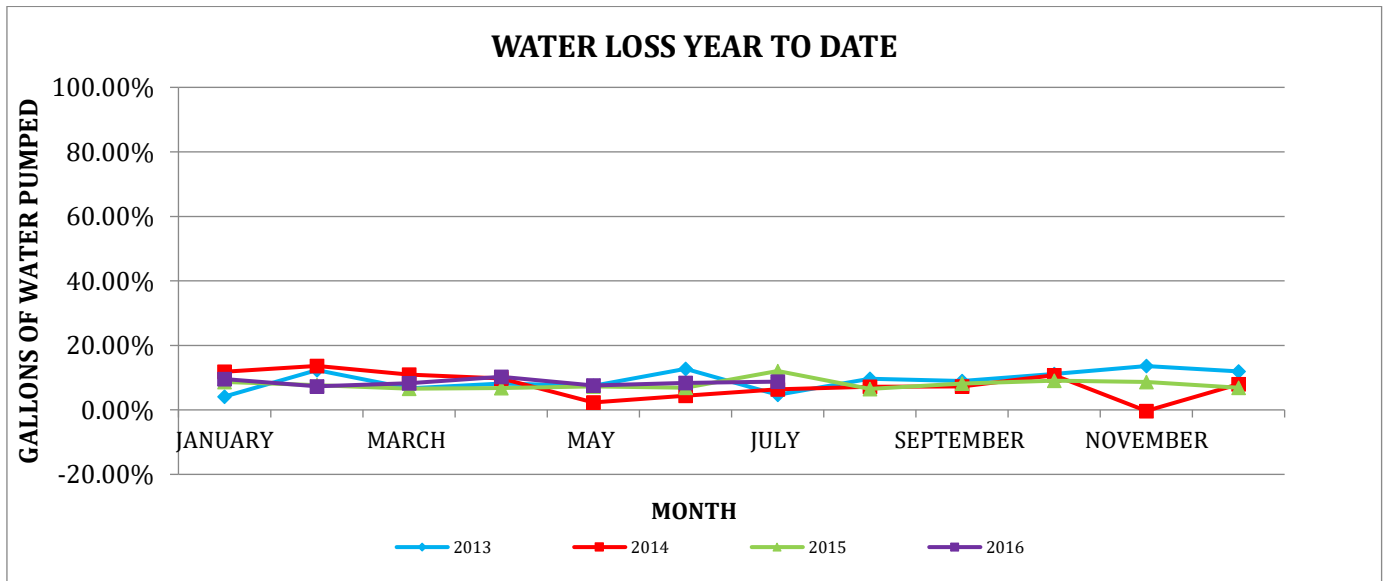
The next two charts show the daily pumpage data compared to previous years. Through July the City has pumped 200.7 million gallons of water this year. Last year during the same period the City pumped 180.4 million gallons.



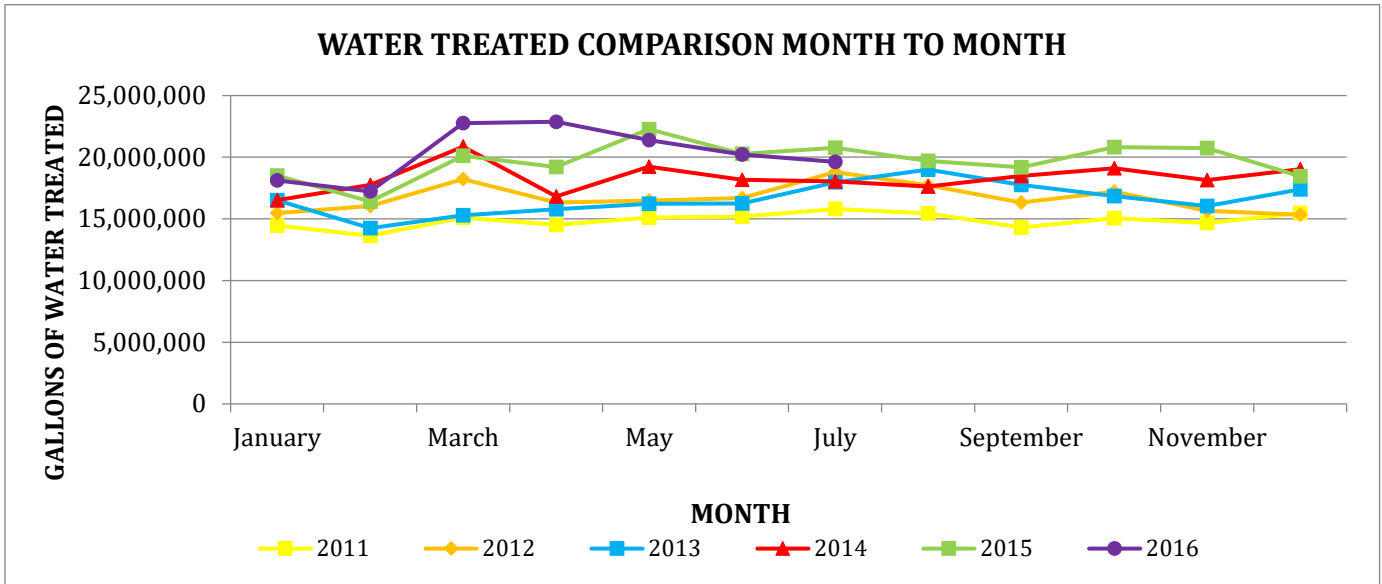
The next chart shows the daily pumpage compared with rain.



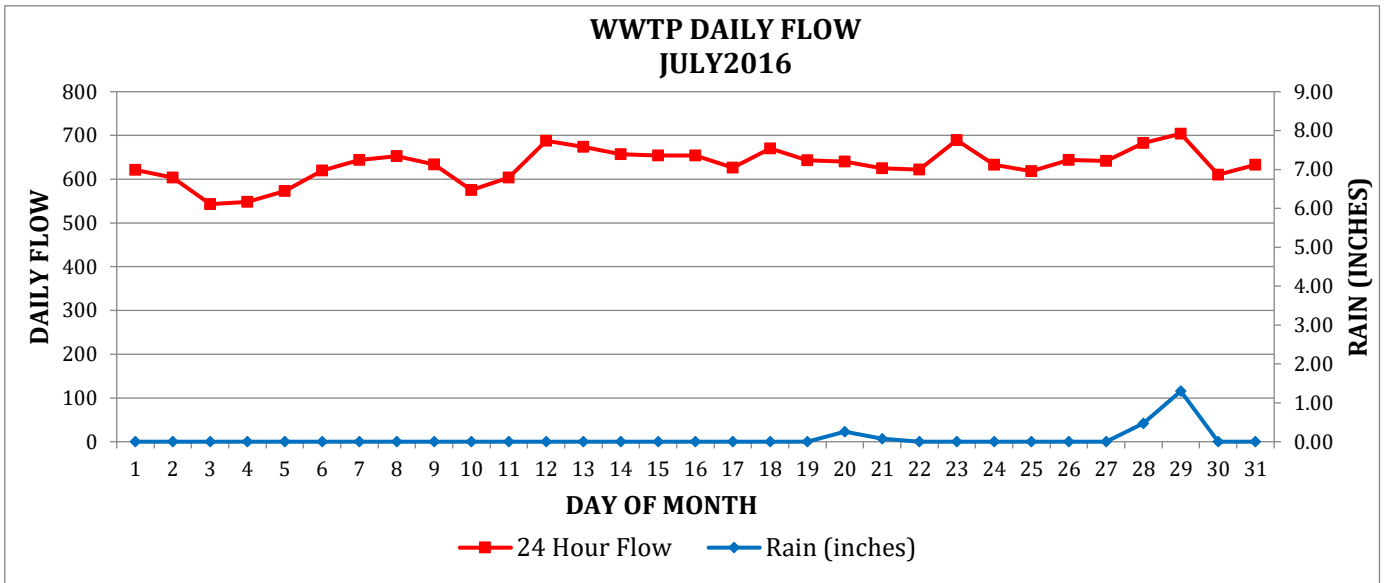
The water loss for the month of July was 8.78%. The chart below compares the loss rate to previous years.



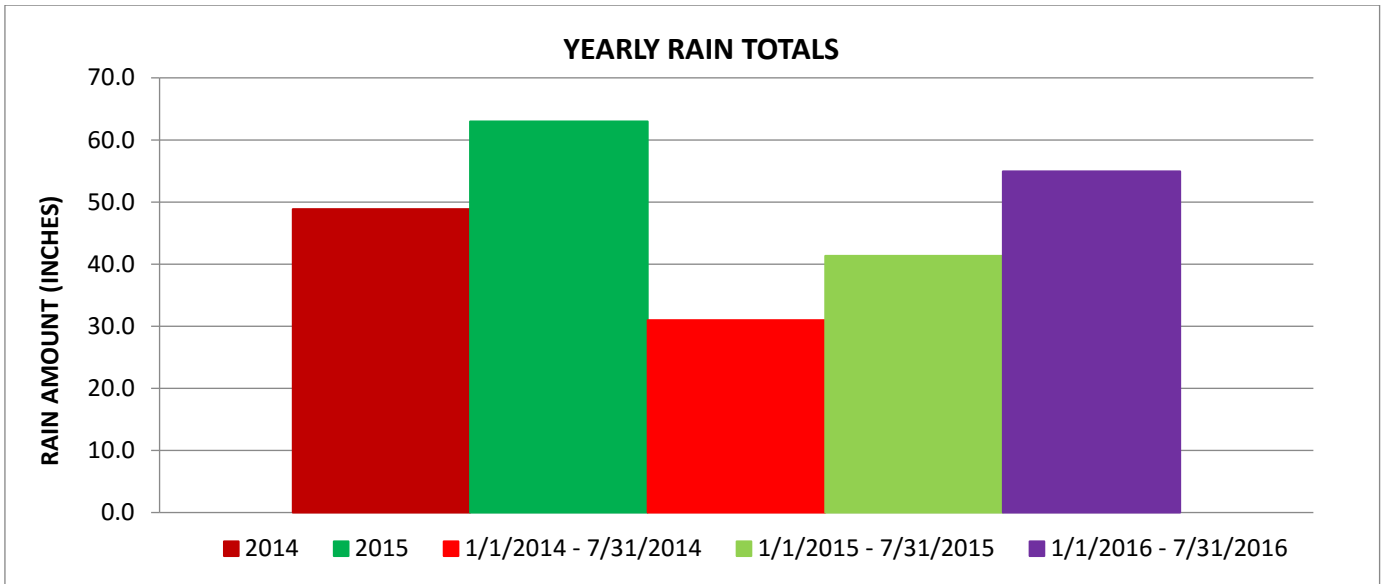
The next chart compares flow data at the wastewater treatment plant to previous years.



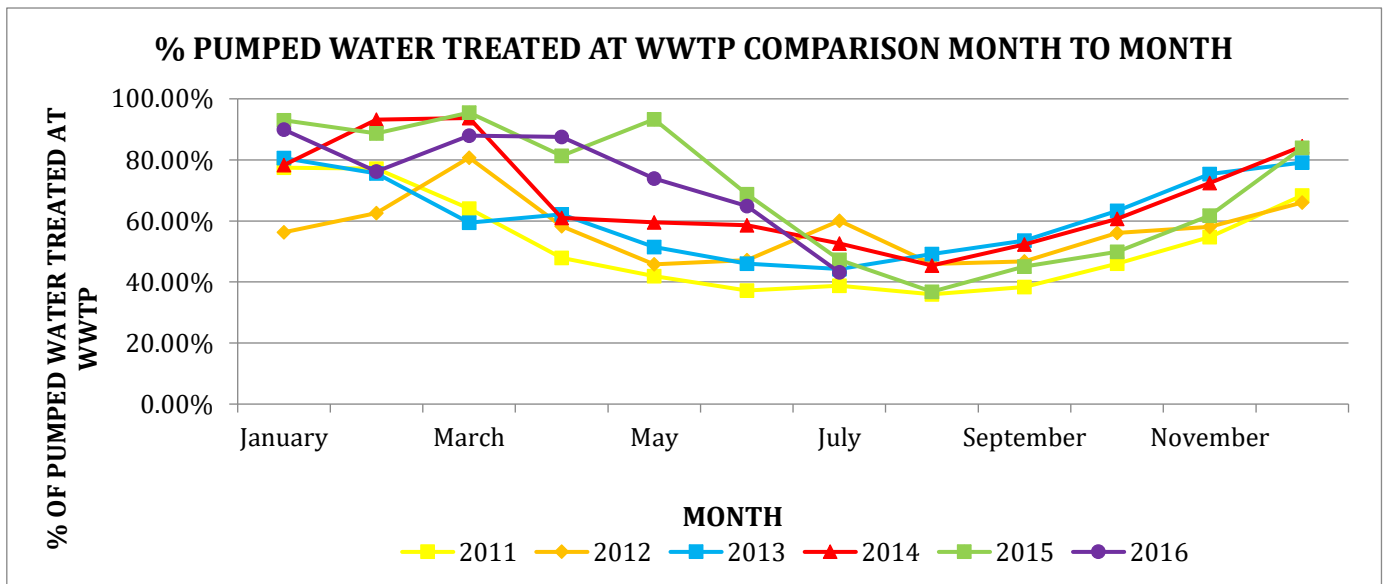
The City's wastewater treatment plant flowed 19.6 million gallons this month for an average of 633,161 gallons per day. Through the year, the City has treated 142.2 million gallons. The chart below shows the daily flow at the treatment plant and daily.



Through July 31st the City has registered 54.93 inches of rain at the treatment plant compared to 41.32 and 30.98 inches in previous years. The next chart summarizes rainfall from previous years.



The City “recovered” over 43.17 % of the water pumped at the treatment plant. The chart below compares the monthly percent recovery to previous years.



On June 22nd TCEQ performed a standard inspection of the City’s water system. Our water system was review by TCEQ and rated to be a Superior water system.

On July 6th a 10” water line broke at the corner of Shenandoah Dr. and IH-45 southbound service road. Two commercial customers (Valero and Days Inn) were out of water for two hours as repairs were made.

SUBMITTED BY: Joseph Peart

