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MEMORANDUM

CWS File #07-240

To: Ben Wade, CWCB

From: Michelle Hatcher

cc: Julie Pasillas, Town of Firestone

Date: October 5, 2017

Subject: 50% Progress Report for Town of Firestone's *Installation of Water Efficient Irrigation Controls on Park Irrigation Systems* and *Residential Irrigation Systems Clock Retrofit Program*

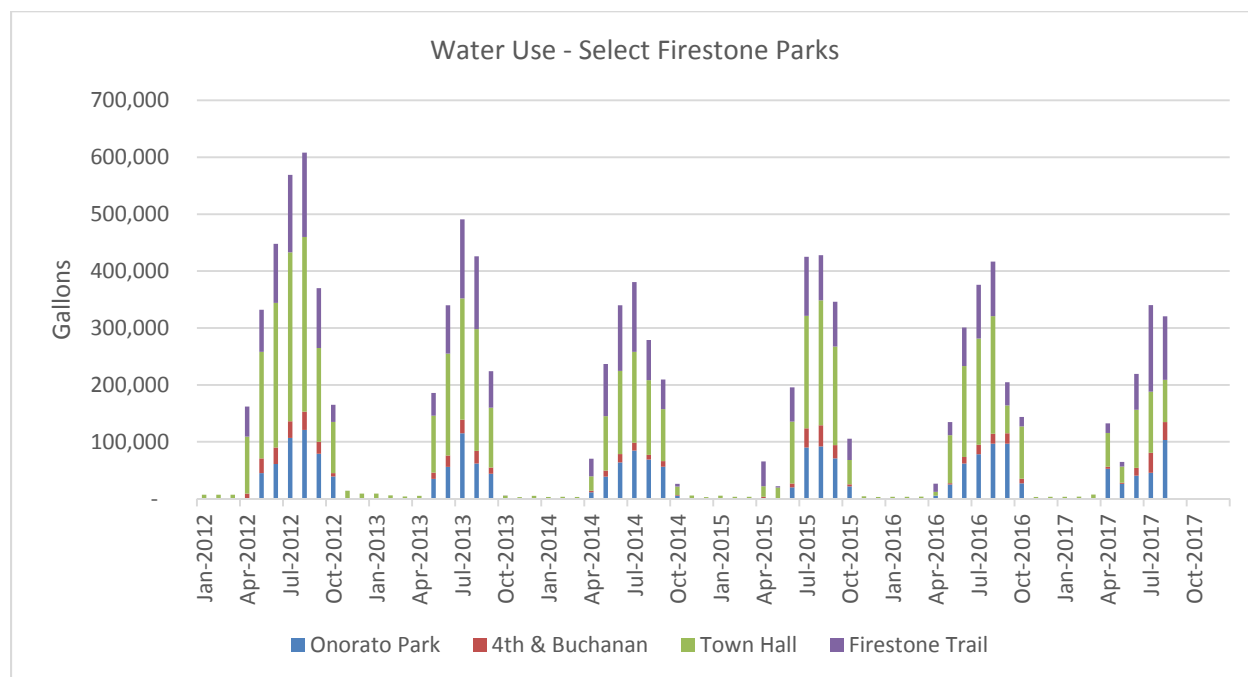
Clear Water Solutions (CWS) is assisting the Town of Firestone (Town) with implementation of the *Installation of Water Efficient Irrigation Controls on Park Irrigation Systems* (New Irrigation Controls) and *Residential Irrigation Systems Clock Retrofit* (Clock Retrofit) programs. After coordinating with Town Staff about the details regarding these two programs, CWS submitted a grant application to CWCB on June 23, 2016. The Town received a purchase order from CWCB for the grant near the middle of August 2016.

Installation of Water Efficient Irrigation Controls on Park Irrigation Systems

After receiving the purchase order from CWCB, the first task of the New Irrigation Controls program was to purchase the iCentral Controllers for the parks. The iCentral Controllers were purchased at the end of November 2016. The next task for this program was to install the iCentral Controllers at the four selected Parks (Firestone Trail near Adams Bank, Town Hall, Onorato Park, and 4th & Buchanan Pocket Park). All of the iCentral Controllers were installed at the beginning of March 2017. The iCentral Controllers were verified to be working correctly and then linked to the existing network of the Town's other iCentral Controllers. The new controllers were completely installed and functional by early April of 2017.

The previous five years of data for these parks has been collected and is currently in the process of being analyzed. The following chart shows the four parks and the data collected. The analysis will continue as more data is collected and processed post-installation. Although difficult to determine with limited analysis and data, 2017 appears to have a reduction in water use even though June and July had below average precipitation.

Firestone's New Irrigation Controls and Clock Retrofit Programs
50% Progress Report
October 5, 2017



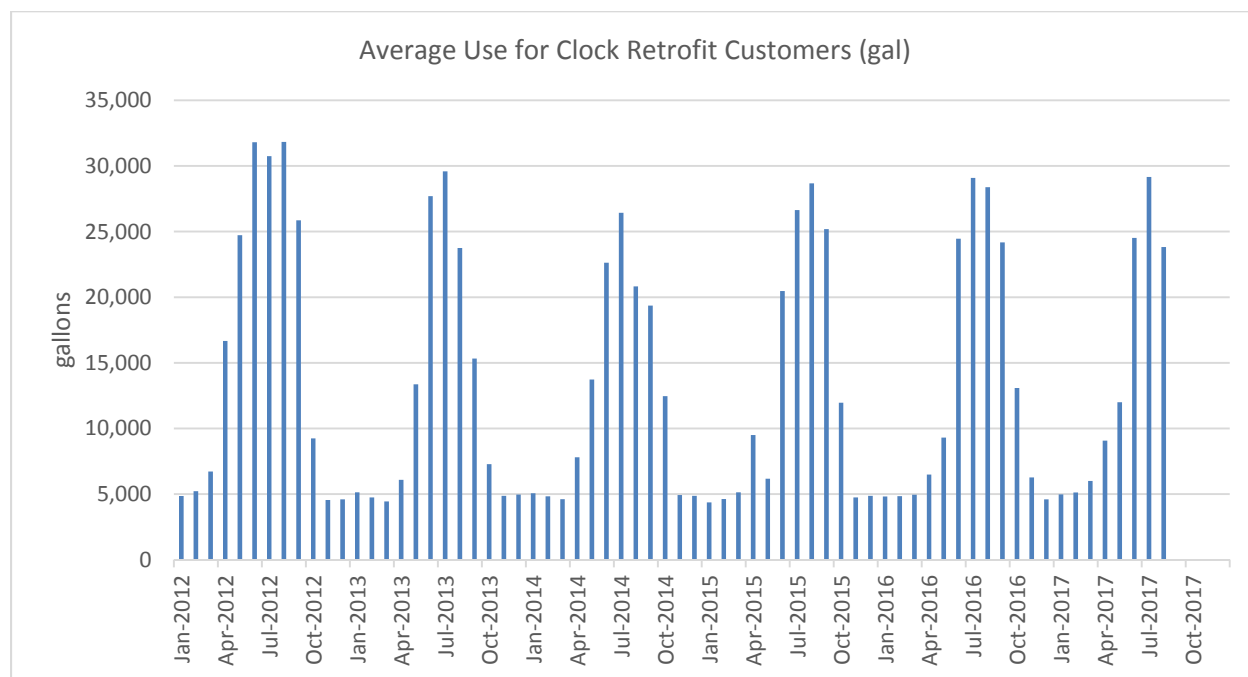
Residential Irrigation Systems Clock Retrofit

After receiving the purchase order from CWCB, the first task of the Clock Retrofit was to publicize the program to the Town's customers. The Town accomplished this with posting the program on the Town's website and mailing out flyers in customer bills in early January 2017. From the responses received, a list of applicants was generated. Those applicants were evaluated to verify they met the program requirements, and near the beginning of March 2017, a list of applicants was finalized.

From a list of potential applicants and other factors, it was determined that fifty clocks would be purchased for the Clock Retrofit. Once the clocks were ready, the qualified applicants were notified of the clocks' availability. To this date, only 43 of the 50 have been installed. Of the 43 installed clocks, all have been inspected by Town Staff. The inspections were completed near the end of April 2017. The seven remaining clocks were returned from customers that needed clocks with more zones than the Town was offering. Firestone will advertise the remaining clocks' availability early in January 2018 and, if needed, again in March 2018.

Data from the initial 43 participants has begun to be collected by the Town. The following chart shows the average use for the customers who have installed the new clocks. The data will continue to be collected and analyzed to estimate the savings that has occurred from the installation of the clocks.

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Schedules

To date, the Town has followed many steps of original schedules fairly closely. Revised schedules for the New Irrigation Controls and Clock Retrofit programs are shown in the following tables.

Installation of Water Efficient Irrigation Controls on Park Irrigation Systems

Task	Date
Grant application submitted to CWCB	6/23/2016
CWCB approves grant and PO issued	8/16/2016
Purchase 4 iCentral Controllers	11/30/2016
Install iCentral Controllers at the selected Parks:	3/2/2017
Verify that iCentral Controllers were installed correctly and are working properly	4/3/2017
Link newly installed iCentral Controllers to existing network of Town iCentral Controllers	4/3/2017
Analyze historical water use for the selected Parks	5/1/2017
Submit 50% progress report to CWCB	10/4/2017
Submit 75% progress report to CWCB	1/10/2018
Complete water use data tracking and analysis	1/24/2018
Complete final report documenting activities and savings	1/31/2018
Presentation to Town Board and final adoption of program	2/14/2018
Submit final report to CWCB	6/27/2018

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Residential Irrigation Systems Clock Retrofit

Task	Date
Grant application submitted to CWCB	6/23/2016
CWCB approves grant and PO issued	8/16/2016
Town will publicize the Residential Irrigation Systems Clock Retrofit program.	1/2/2017
The Town will evaluate the Retrofit applications to verify that all rules and requirements have been met	3/1/2017
Once an initial response occurs, the Town will estimate how many clocks of each type will be needed	3/1/2017
Clocks will be purchased	11/10/2016
The Town will contact the individual water utilities customers to notify them that the clocks are available; customers will install clocks; inspections will be performed	4/24/2017
Submit 50% progress report to CWCB	10/4/2017
The Town will begin to analyze the historical water use of customers that picked up the clocks	10/4/2017
Submit 75% progress report to CWCB	1/10/2018
Complete water use data tracking and analysis	1/24/2018
Complete final report documenting activities and savings	1/31/2018
Presentation to Town Board and final adoption of program	2/14/2018
Submit final report to CWCB	6/27/2018