

# Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458-8964

Telephone (561) 747-5700 • Fax (561) 747-9929 • [www.loxahatcheeriver.org](http://www.loxahatcheeriver.org)



D. Albrey Arrington, Ph.D., Executive Director

## MEMORANDUM

TO: Albrey Arrington, Executive Director

FROM: Tom Vaughn, Director of Operations

DATE: April 12, 2016

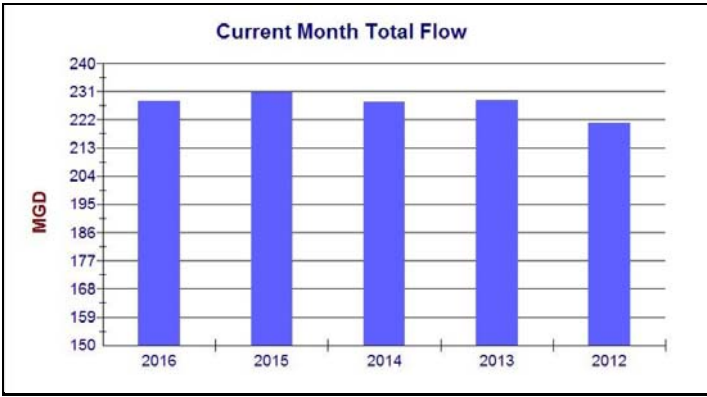
SUBJECT: Operations Department Monthly  
Report for March 2016

### Treatment Plant Division

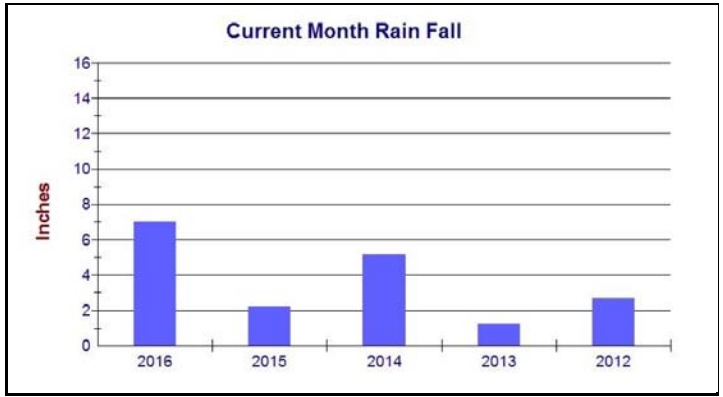
The month of March saw the start of budget planning and continued cross training between operators and the maintenance staff. Operators attended the FW&PCOA short school in March and all of our operators attended the American Heart Association's Heartsaver CPR AED training.



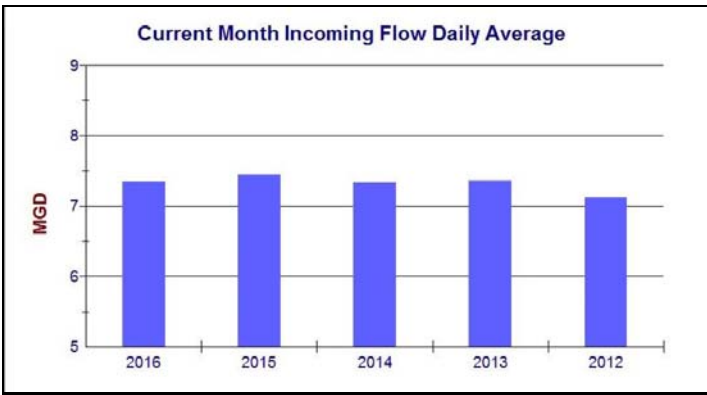
**We have had another great month of no Permit exceedances.**



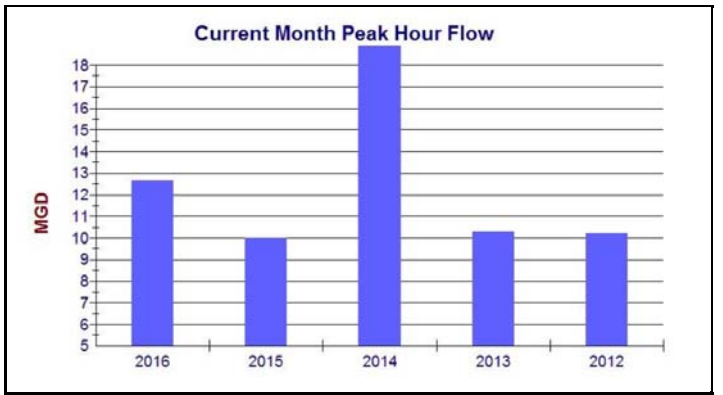
The plant total flow for the month of March was 227.95 million gallons.



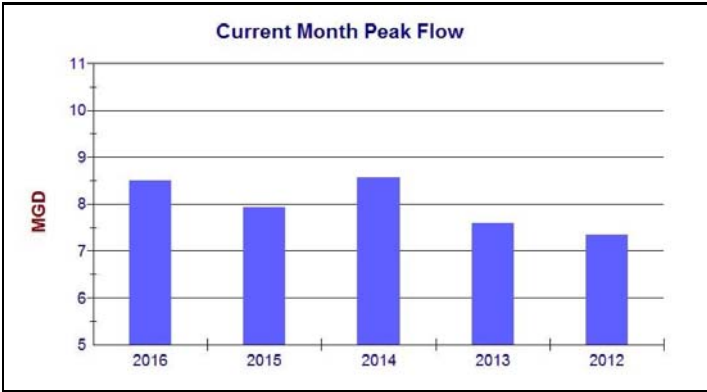
7.01 inches of rainfall were recorded at the plant site during the month of March.



The treatment plant incoming flow for the month of March averaged 7.35 MGD compared to 7.44 MGD one year ago for the same month.

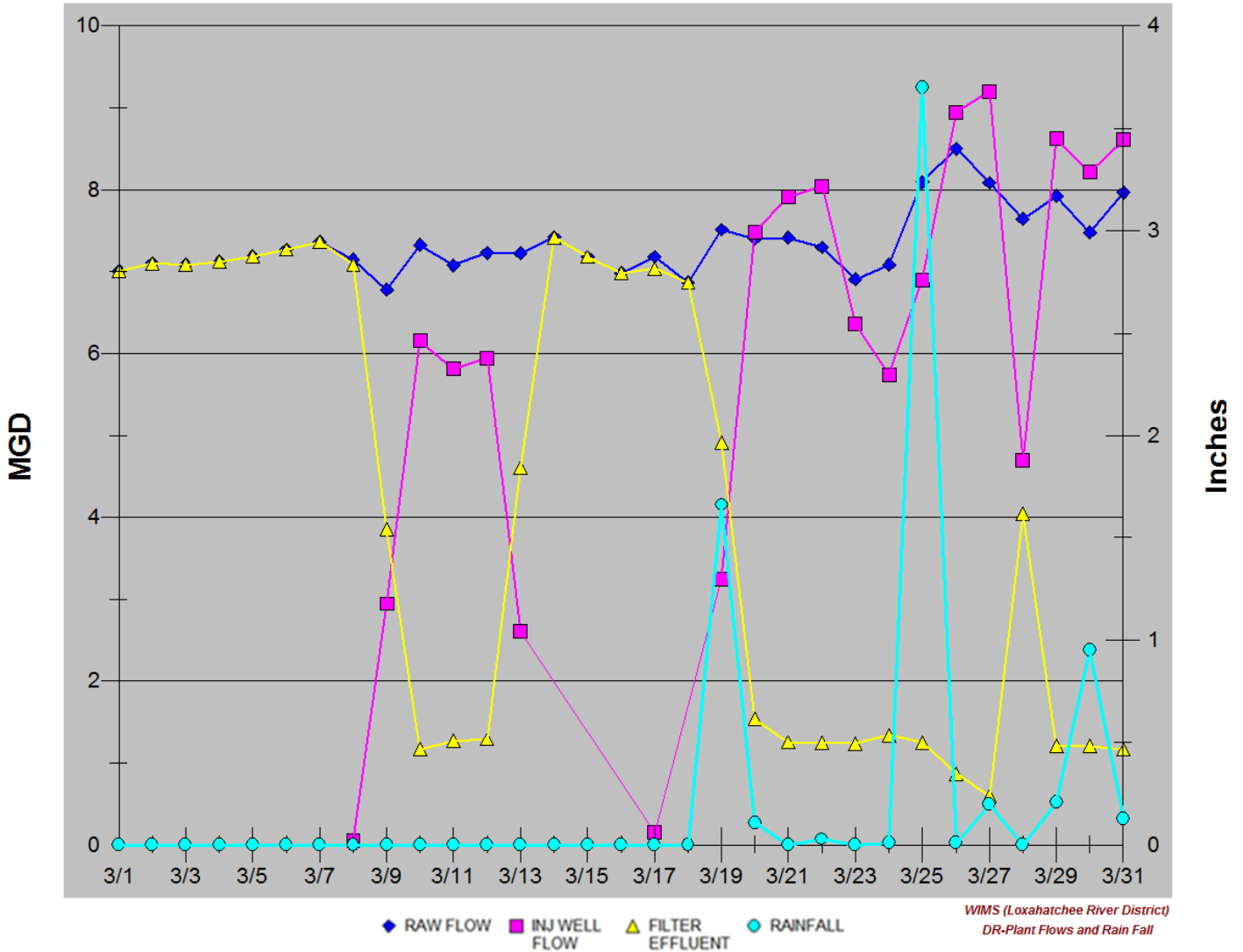


The peak hourly flow rate in March was 12.67 MGD.



The greatest single day average flow in March was 8.50 MGD.

The plant received 227.95 MG of influent flow of which 126.85 million gallons were sent to the IQ storage system where they were dispersed as needed to the various golf courses and the Abacoa development sites. Due to wet weather conditions and 7.01 inches of rain during the month, 117.69 million gallons of blended effluent was diverted to the Injection Well. Overall, 55.65% of incoming flows was recycled for IQ use and the plant delivered 135.35 million gallons of IQ water to the Reuse customers.



For the year 2016, the plant recycled 32.67% of all incoming flow and the total amount of IQ water delivered to reuse customers stands at 225.34 million gallons.

All required monthly reporting has been submitted on time.

## Safety / Compliance

**TRAINING.** Training for the month of March involved the understanding of Ergonomics.

Ergonomics is defined as the science of arranging things, and the people who use them, to interact as safely and efficiently as possible. Also called biotechnology or human engineering, understanding the principles of ergonomics allows employees to recognize known hazards and control their risk of injury. A few examples would be using proper lifting techniques to help avoid back injuries or using appropriate personal protective equipment, such as knee pads to avoid painful situations while kneeling during a required task. Ergonomics also addresses repetitive motions that may increase the risk of musculoskeletal disorders (MSDs) and how to mitigate these situations.



**D.E.P.** The District held DEP certification testing on the 10<sup>th</sup> and 11<sup>th</sup> of March in the Operations Education Room. An average of one hundred people visit our facility each month in the hopes of advancing their license status. Certification tests include drinking water, wastewater, collections and distribution. All of these certifications play a very important role to ensure that the people involved within Florida's water industry are as knowledgeable as they can possibly be.



The training and education involved and required, assure our communities that they are receiving the very best from their local facilities.

**CPR & AED.** CPR and AED certification training was completed by members of the Operations, Collections, Maintenance, Engineering and Construction departments. The training was performed by a certified instructor of the American Heart Association, and each employee received a training certificate valid for two years.

CPR (cardiopulmonary resuscitation) is a life-saving procedure which helps to keep blood flowing to the brain, by the use of chest compressions, in the event an incapacitated person is not breathing or their heart has stopped. These situations may be encountered by a person after receiving a severe electric shock, heart attack, or drowning. The proper use of an AED (automated external defibrillator) was also included in the training regimen. A portable AED is used to deliver a brief electroshock to an incapacitated person's heart, through electrodes placed directly on a person's chest.

The AEDs found in various locations here at the District, have the ability to analyze a patient's condition and determine if their heart is in a shockable condition. If the AED determines that a shock is warranted, it will give a command to

prepare, and to administer the electrical shock to the person in need. There are situations in which a person is deemed “not shockable” and the unit will advise the user that no shock shall be administered.

Statistics show that the use of an AED within the first five minutes of a person suffering from cardiac arrest can increase their chances of survival from less than 5% to as much as 70%. The tools and training provided by the District, offer invaluable life-saving technics and equipment, which are always ready at a moment’s notice.



**Jupiter U.** The District received a visit from “Jupiter U” on the 16<sup>th</sup> of March. Jupiter U is a program developed by the Town of Jupiter to offer residents an opportunity to learn about their local government and supporting services. Residents received an in depth tour of our facility and gained an education on how the District collects, recycles, and reuses over 7 million gallons every day from our community.

Topics discussed included, how being a “zero discharge” facility we are able to protect our local water ways from surface water discharges. The District’s mission to conserve precious drinking water by recycling reclaimed water for irrigation purposes.

Public education and laboratory testing, help our communities understand how our efforts protect and enhance the quality of life in our area. Many of the people I spoke with were very familiar with the Loxahatchee River District and very satisfied with our purpose and achievements.

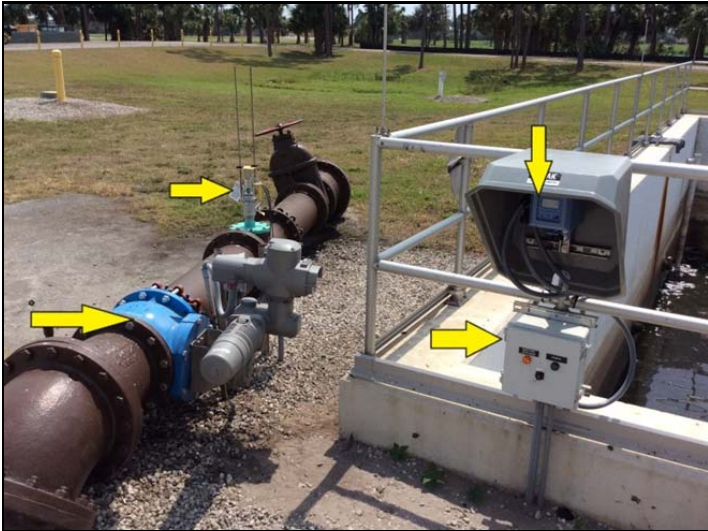


The District has no injuries to report for the month of March.



## Collections and Transmissions Division

**BELOW.** Work was performed on the Nano-concentrate main from the Town of Jupiter WTP and is part of directing concentrate flow to the District's lake storage or to the deep well injection station. The project included a new SCADA controlled electric actuator and valve as well as a new flow meter that is tied into SCADA for real time data trending. All work was performed by District reuse operators, the Construction crew, and PCC (Process Control Consultants). The start-up began with a visit by a flow meter vendor representative.



**BELOW.** A District route crew and Vendor technician worked on installing a spare actuator on the pump check plug valve. This work was performed at the Master pump station #1 on the pump #3 discharge check valve.



**RIGHT.** A factory refurbished water strainer was delivered to the District warehouse and checked into inventory. This was per budget R & R Reclamation & Disposal. The strainer is for the Abacoa Master Reclaimed pump station #518. It was a complete factory rebuild with new interior rubber lining.



**LIFT STATIONS.** For the reporting month, eleven (11) new low pressure systems came online in the low pressure pump station system.

The District's Vac Con Crew cleaned the following lift stations in March 2016; # 11-13-15-18-34-83-88-93-126-140-153-160-170-208-226-233.

The District's engineering one (1) year Bond inspections were:

- Limestone Cay; 6 manholes with 1,208 lineal feet of mainline
- Els Center of Excellence RI; 5 manholes with 932 lineal feet of mainline
- Jupiter Medical Center; 7 manholes with 655 lineal feet of mainline

**BELOW.** Cleaning of the influent line to clarifier # 1 was successful. Collections, Construction, Plant and Maintenance crews worked together on this project and all personnel involved did an excellent job of safely and efficiently clearing the blockage within the line.





## Maintenance

Once again, the District's Maintenance Crews performed excellent work fabricating components so that we can better maintain our infrastructure.

**BELOW.** Clarifier #1 has supporting straps welded to the upper and lower sections of the main structure of the piping that the rake assembly rides on.



The piping had a door cut into it for entry to allow inspections and maintenance to be performed. This will also permit operators to accomplish debris removal and will allow access for remote camera evaluation of the piping.





# Why You Need to Cross Train Your Staff



## 1 Ensure Long Term Success

When you have multiple employees that can handle various tasks within your office, they can help cover responsibilities, that way you won't have to spend extra money hiring a temp employee.

Allowing your employees to constantly learn new tasks and responsibilities is a great way to enhance their career development.



## 3 Improve Workflow

Cross training makes it easier for you to spot inefficiencies in your workflow.

As employees explain the processes behind their tasks and procedures in your practice, they will be forced to look deeply at the way they complete those tasks.

This allows for discoveries and suggestions for improvement.

## 2 Create an All-Star Team

When you have employees with expanded skill sets, you have the opportunity to promote within your practice if someone leaves, which will make both you and your employees happy.

Plus, you'll boost morale within your practice because your staff will feel valued as they see you investing in their personal skills.



## 4 Increase Teamwork

Cross training provides your staff with the ability and opportunity to collaborate across departments.

As they begin to understand how the various roles connect across your practice, you'll be able to eliminate the "that's not my job" mentality.



**See ya' at the Top – (That's near Cheese Station "N")**

**Tom Vaughn  
Director of Operations**