

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

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

MEMORANDUM

TO: Albrey Arrington, Executive Director

FROM: Tom Vaughn, Director of Operations

DATE: July 8, 2015

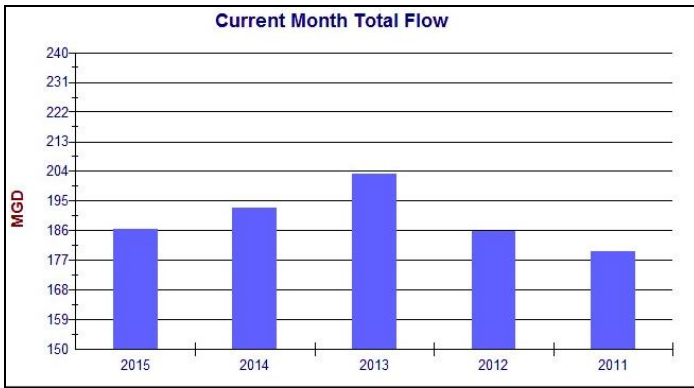
SUBJECT: Operations Department Monthly
Report for June 2015

Treatment Plant Division

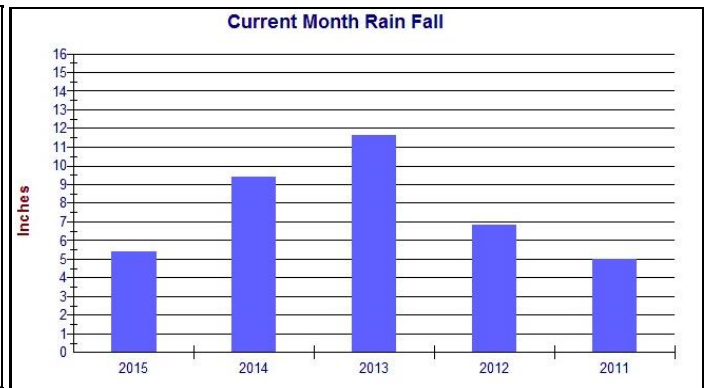
DO Probe and Controller maintenance plans with YSI Xylem Brand have been initiated. These plans will increase efficiency, lower costs and decrease maintenance requirements. Actual upkeep will begin in the following months and testing of the equipment will continue for 90 to 180 days.



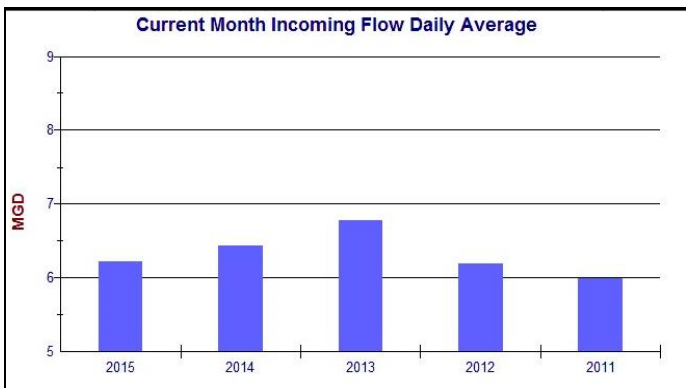
We have had another great month of no Permit exceedances.



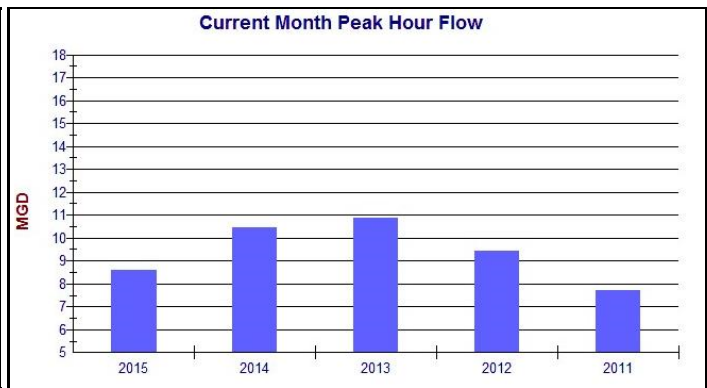
The plant total flow for the month of June was 186.46 million gallons.



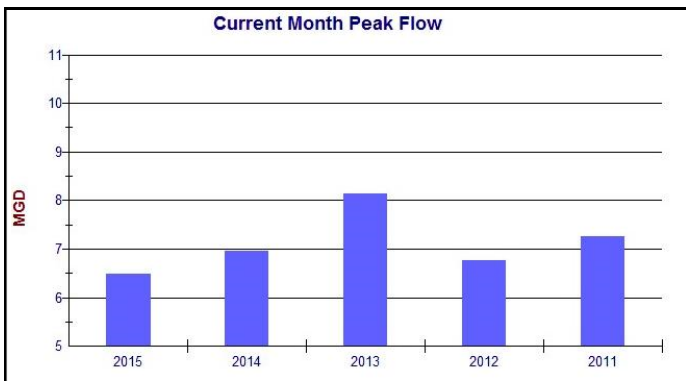
5.39 inches of rainfall were recorded at the plant site during the month of June.



The treatment plant incoming flow for the month of June averaged 6.22 MGD compared to 6.43 MGD one year ago for the same month.

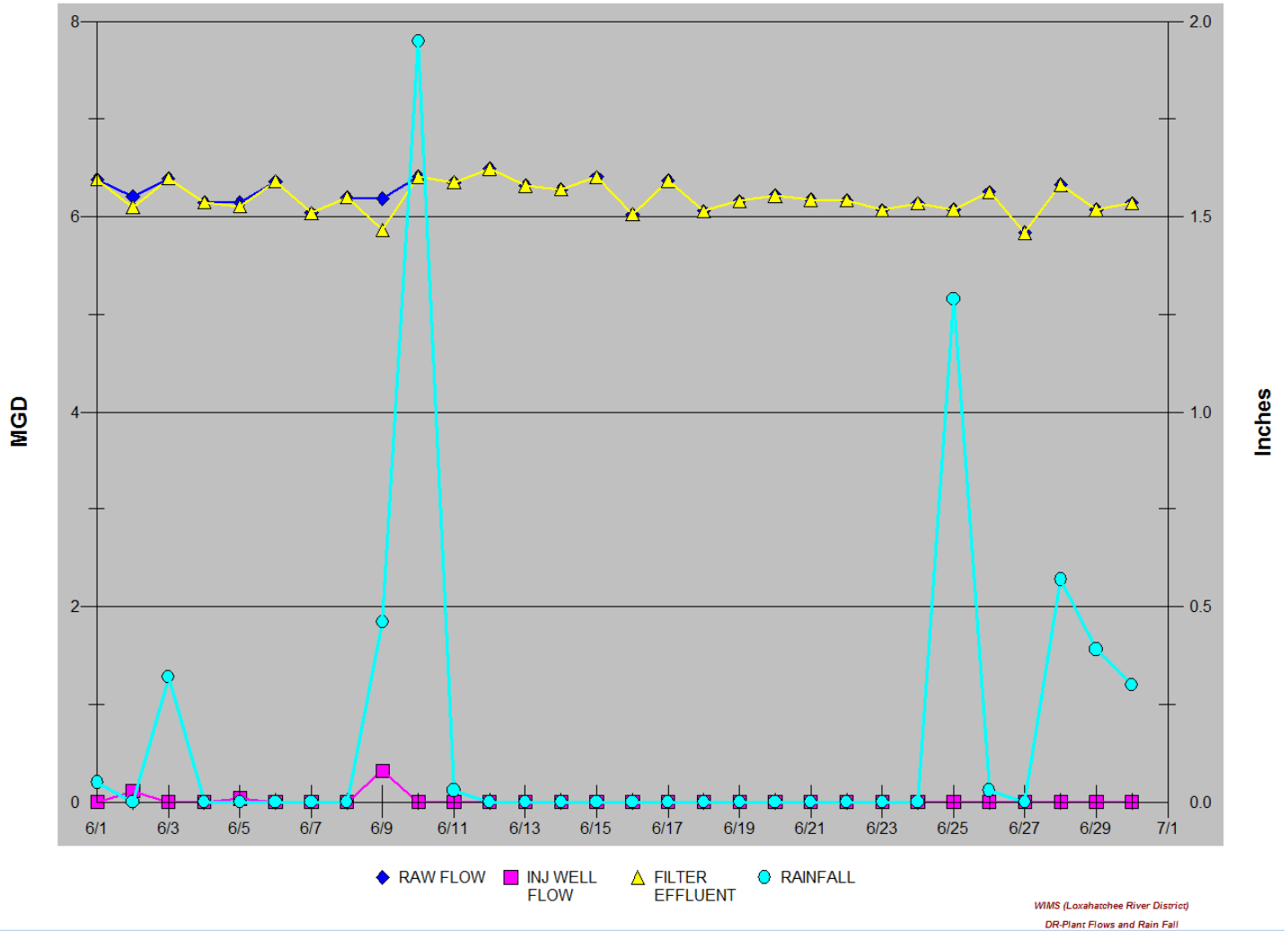


The peak hourly flow rate in June was 8.61 MGD.



The greatest single day average flow in June was 6.49 MGD.

The plant received 186.46 MG of influent flow of which 185.990million 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 5.39 inches of rain during the month, .47 million gallons of blended effluent was diverted to the Injection Well. Overall, 99.75% of incoming flows was recycled for IQ use and the plant delivered 215.53 million gallons of IQ water to the Reuse customers.



For the year 2015, the plant recycled 68.32% of all incoming flow and the total amount of IQ water delivered to reuse customers stands at 1,014.84 million gallons.

All required monthly reporting has been submitted on time.

Safety / Compliance

TRAINING. The DEP held certification testing for two full days here in the Operations Education Room.

Approximately 100 people attended this event to further their certifications in the Water and Wastewater industry.

The District is also very pleased to announce it has added a CPR & AED certification course to its training program.

The CPR & AED certification is valid for two years, and those who participate are eligible for .5 CEU's towards their license requirements.



INSPECTIONS. The Pretreatment Program conducted testing at various locations in Harbourside Place during the month of June.

These inspections verify that flows to lift stations and ultimately our treatment facility meet all the standards included in the District's Sewer Use Ordinance.

Members of WildPine Laboratory, Engineering department and the Safety and Compliance department worked together to obtain all the samples needed.

SAFETY TRAINING. Do you feel stressed? Safety training for the month of June included the effects of stress on the human body. Employees learned to understand the symptoms of, and how to control stress in their daily routines. Stress contributes to cardiovascular disease and if severe, can lead to heart attack. The options discussed, to help reduce stress, included regular exercise, adequate sleep and laughing. Another interesting fact, pointed out was that watching TV generally does not relieve, but can aggravate stress.

Spine Design Chiropractic, located here in Jupiter, held an ergonomics workshop in the Operations Education Room. Dr. Chad Neeld and his team discussed proper lifting techniques and general back safety. District employees also learned the benefits of stretching to help avoid muscle strains.



Collections and Transmissions Division



LEFT. Two (2) water strainers that are for the Abacoa Master Reclaimed Water Pump Station #518 were purchased this month. One was a Budget Capital purchase and one was a Budget R x R refurbishment of an existing unit. Both strainer units were delivered and received by the District Warehouse and checked out by the District route crew to be set up for storage in the equipment barn.

BELOW. The Pump Shop Plant/Field Electrician and Pump Shop Operator Technician disassemble and inspect Field Lift Station submersible pumps to analyze for repair cost estimates and to make ready for spare stock or return to the Field.



BELOW. On the Plant Site at Master Reclaimed Water Pump Station #511, continued investigation work on the #3 VFD (variable frequency drive) for a reoccurring fault code.

The District Electrician/Instrumentation technician has been working with the VFD Vendor representative. The factory recommended process is a three (3) step drive part change out, and factory download/upload of the data logger program. This collects internal drive parameters for diagnosis information.



BELOW. The District Collection Crew worked with the Construction Crew to change out the manhole frame and cover at the intersection of County Line Rd and Old Dixie Highway in Tequesta.

The work performed was scheduled. At the same time, the interior coating of the manhole was inspected, as there are three (3) force mains that terminate within this manhole.



RIGHT. The installation of a new 20" check valve at Booster Station #200 in Abacoa was completed in June.

The new style valve was a Budget R x R purchase. It is a different design that will not accumulate "rags" or other fibrous materials. The original 1996 version required an annual service to the check valve.



LEFT. For the reporting month, one (1) new low pressure systems came online in the Low Pressure Pump Station System.

The District Vac Con Crew cleaned the following Lift Stations in June 2015; #204, 218, 88, 83, 16, 199, 75, 140, 203, 11, 212, 211, 192, 61, 17, 102, 172, 226, and 249.

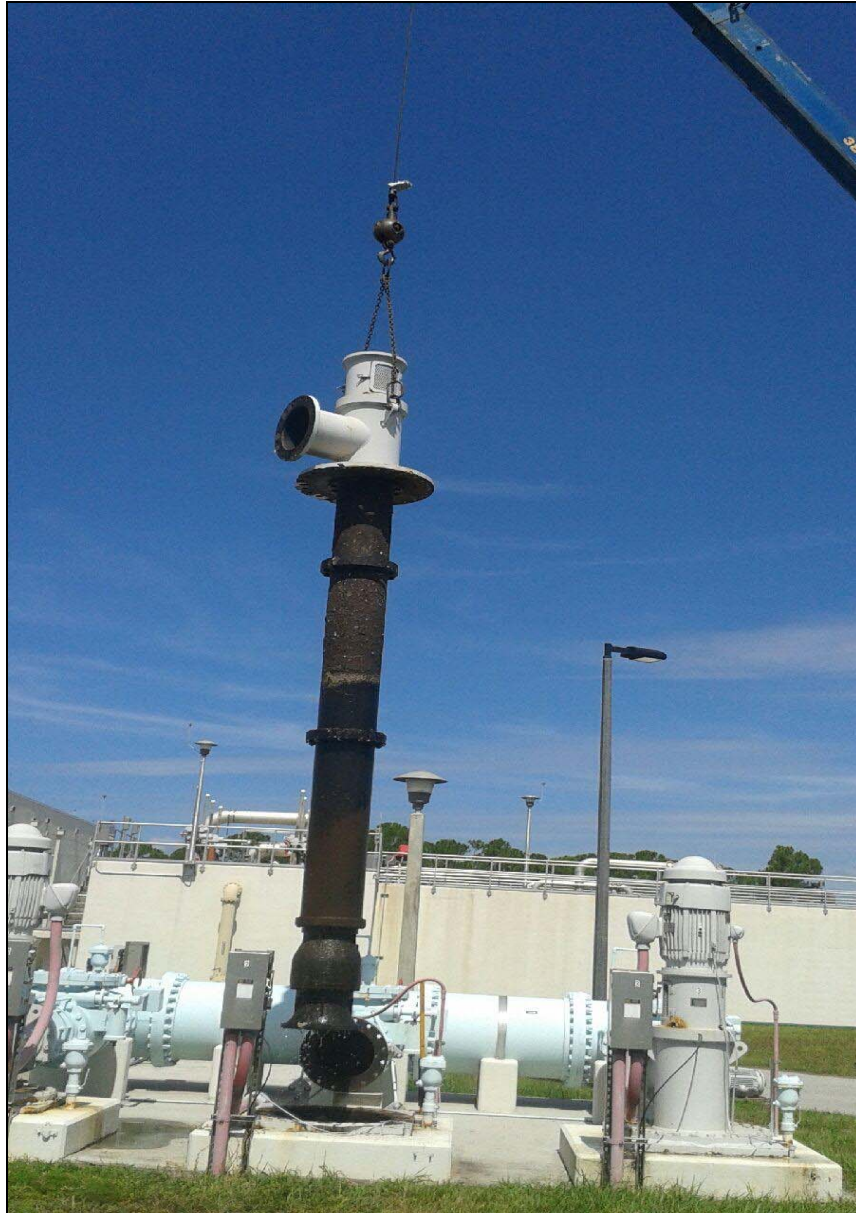
The crew also assisted the Engineering Department on the "one year Bond" inspection of the gravity system for Lift Station #174; 18 manholes and 2,867 lineal feet of gravity main as well as Lift Station #173 gravity system; 13 manholes and 2,496 lineal feet of gravity main.

During the reporting month, there were no major system or equipment failures in Field Collection/Transmission systems that caused emergency or systems to not operate normally.



Maintenance

BELOW. The filter pump station turbine pump and motor has been assessed during routine scheduled inspection and maintenance. The pump will be disassembled, tolerances measured and if parts are in need of replacement they will be replaced. It will also be sand blasted and sealed to prevent deterioration.



Tidbits from Tom

June, 2015 – *National Health & Safety Month*



It's no wonder that June is the National Health and Safety month. As one of the hottest months out of the year, it is important to consider these issues. Hydration is vital this month as the summer heat can quickly and easily cause dehydration.

Stay safe, have fun and have a great summer!

Perspective:

The Mule in the Cistern

A parable is told of a farmer who owned an old mule. The mule fell into the farmer's well. The farmer heard the mule 'braying' -or-whatever mules do when they fall into wells. After carefully assessing the situation, the farmer sympathized with the mule, but decided that neither the mule nor the well was worth the trouble of saving. Instead, he called his neighbors together and told them what had happened ...and enlisted them to help haul dirt to bury the old mule in the well and put him out of his misery.

Initially, the old mule was hysterical! But as the farmer and his neighbors continued shoveling and the dirt hit his back ... a thought struck him. It suddenly dawned on him that every time a shovel load of dirt landed on his back, he should shake it off and step up! This he did, blow after blow. "Shake it off and step up...shake it off and step up...shake it off and step up!" He repeated to encourage himself. No matter how painful the blows, or how distressing the situation seemed the old mule fought "panic" and just kept right on shaking it off and stepping up!

It wasn't long before the old mule, battered and exhausted, stepped triumphantly over the wall of that well! What seemed like it would bury him, actually blessed him...all because of the manner in which he handled his adversity. If we face our problems, respond to them positively, and refuse to give in to panic, bitterness, or self-pity, the adversities that come along to bury us usually have within them the potential to benefit and bless us.

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

**Tom Vaughn
Director of Operations**