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: December 8, 2015

SUBJECT: Operations Department Monthly

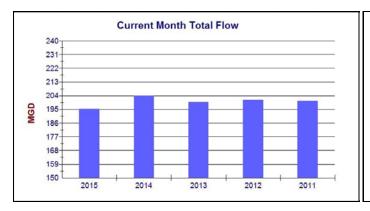
Report for November 2015

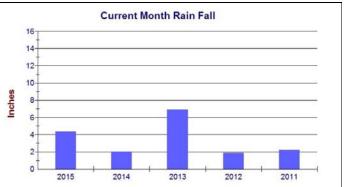
Treatment Plant Division

With higher demands placed on the treatment plant over the Thanksgiving holiday, cross training has been a major benefit. In November, the plant saw the advantages to our cross training efforts as our newly licensed operators in both the plant and the maintenance crews stepped in to fill critical positions. Our lead operators have been involved in the cross training of their peers to have the ability to perform all the tasks of a lead operator. This objective has helped to encourage an understanding and appreciation between colleagues. In strengthening the ties between operators and their leads the Loxahatchee River District is ensuring that those responsible for operating the plant have the best possible chance for success.



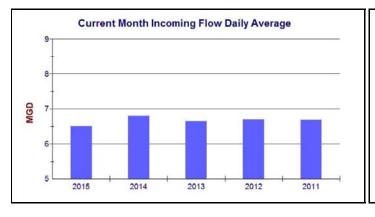
We have had another great month of no Permit exceedances.

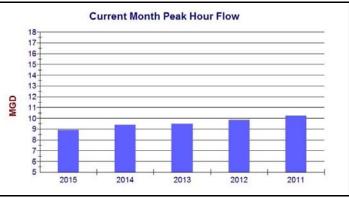




The plant total flow for the month of November was 195.19 million gallons.

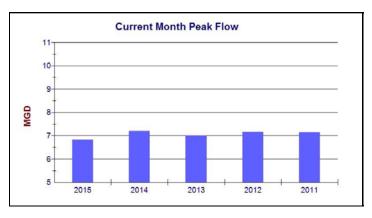
4.34 inches of rainfall were recorded at the plant site during the month of November.





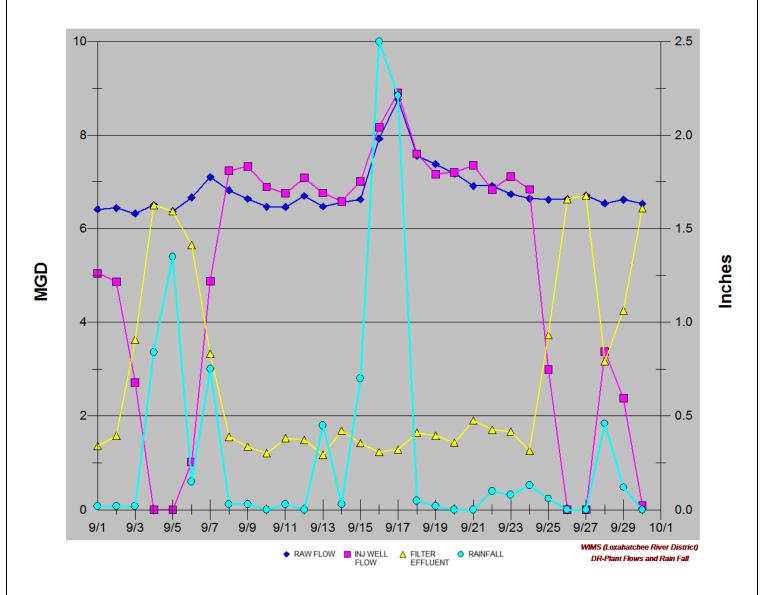
The treatment plant incoming flow for the month of November averaged 6.51 MGD compared to 6.80 MGD one year ago for the same month.

The peak hourly flow rate in November was 8.93 MGD.



The greatest single day average flow in November was 6.83 MGD.

The plant received 195.19 MG of influent flow of which 152.31 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 4.34 inches of rain during the month, 44.60 million gallons of blended effluent was diverted to the Injection Well. Overall, 78.03% of incoming flows was recycled for IQ use and the plant delivered 156.91 million gallons of IQ water to the Reuse customers.



For the year 2015, the plant recycled 71.53% of all incoming flow and the total amount of IQ water delivered to reuse customers stands at 1,699.92 million gallons.

All required monthly reporting has been submitted on time.

Safety / Compliance

TRAINING. A new training area has been completed next to the Operations Administration building. The covered area will allow for space when conduct training sessions that may require a broader area than our education room can provide. The outdoor atmosphere has the ability to mimic conditions that may closely resemble conditions found in the field. An example may be gas detection training which takes into account wind direction and humidity levels that may delay an accurate reading.

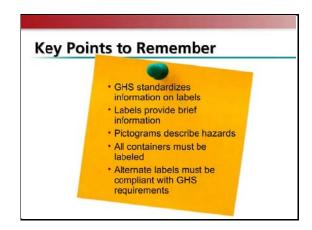


D.E.P. The Loxahatchee River District is pleased to have accommodated over 600 attendees with DEP operator certifications during this calendar year. The DEP plans to continue using the Loxahatchee River District as a testing facility throughout the upcoming year.

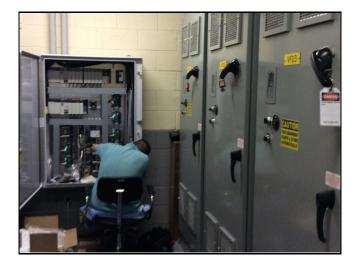
On January 19th & 20th we will have guests from all over the state visiting our facility with the hopes of advancing their certifications.

safety training. Training for the month of November reviewed Chemical Labeling under the Globally Harmonized System (GHS). Under GHS, chemical hazard classification and communication has changed. It is very important for District employees to understand how these changes will affect them. This means continued education on updated chemical labels as well as identifying new hazards during the reclassification process. Keeping all District employees up to date during this transition will help eliminate hazards that may occur due to chemical label or classification misinterpretation.





Collections and Transmissions Division



LEFT. At the District's Master Station #1, the new PLC (programmable logic controller) was installed and is online for the main and bypass operating pumps and control system.

This project was scheduled with the District's PCC (Process Control Consultants) Contractor and the District's Operations personnel.

The work was handled delicately in order to ensure station integrity and reliability with operational functions during the hardware and software upgrades.

BELOW. The District's Construction crew completed the install of new piping, plug valve, and a new secondary flow meter. This project was the Nano concentrate District POC (point of connection) from the Jupiter water plant. This work was scheduled in conjunction with a Town of Jupiter water project which required the shutdown of their well field system. The POC is now fully operational with parallel flow pipe lines for greater reliability.



BELOW. The annually scheduled inspection of the 22 manholes on Indiantown Road Eastbound was completed during this reporting month.

Inspections comprised of: cleaning, lubricating covers and rim seats, inspecting manhole interior conditions and flow channels of the 36 inch transmission trunk pipe line that flows to Master Lift Station #1.

All permits, MOT (maintenance of traffic), and safety procedures were in place. Those involved were the District Operations and Engineering crews.



RIGHT. For the reporting month, six (6) 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 November 2015; #86, 167, 53, 203, 151, 114, 152, and 83.



Maintenance

RIGHT. A Load Bank exercise has been conducted to gauge the operation of the generator at its maximum capacity. A Load Bank exercise is conducted annually to ensure that generators can perform to their designed specifications.



RIGHT. The maintenance team has added shims to a blower motor as indicated with the new laser alignment tool.



LEFT. A vendor has directed a demo for a new laser alignment tool to ensure that the Blower Room blowers and motors are aligned more accurately. Tolerances will allow for a longer bearing life. This new technology is more accurate and easier to use than previous Dial indicators.





LEFT. Filter pump station #2, pump #3 has been removed for inspection and overhaul. Removing the pump allows for a thorough inspection to determine pump condition for need of repairs to worn and deteriorated parts. This helps to prevent unexpected failures.

Tidbits from Tom

Some words that we should never forget are those spoken by President Franklin D. Roosevelt on December 7, 1941 in tribute to the sacrifices made by the people of our nation; the veterans of WWII, who have responsibility in garnering many of the freedoms which we enjoy today. We must also be mindful of the sacrifices of our own family members, some of which we have never met and that have come before us. Our history, both nationally and individually, allows for the freedoms, the comforts and the pride which we presently enjoy.

President Franklin D. Roosevelt: Yesterday, December 7, 1941—a date which will live in infamy—the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan.

The United States was at peace with that nation, and, at the solicitation of Japan, was still in conversation with its government and its emperor looking toward the maintenance of peace in the Pacific. Indeed, one hour after Japanese air squadrons had commenced bombing in the American island of Oahu, the Japanese ambassador to the United States and his colleague delivered to our secretary of state a formal reply to a recent American message. While this reply stated that it seemed useless to continue the existing diplomatic negotiations, it contained no threat or hint of war or armed attack.

It will be recorded that the distance of Hawaii from Japan makes it obvious that the attack was deliberately planned many days or even weeks ago. During the intervening time the Japanese government has deliberately sought to deceive the United States by false statements and expressions of hope for continued peace.

The attack yesterday on the Hawaiian Islands has caused severe damage to American naval and military forces. I regret to tell you that very many American lives have been lost. In addition, American ships have been reported torpedoed on the high seas between San Francisco and Honolulu.

Yesterday the Japanese government also launched as attack against Malaya.

Last night Japanese forces attacked Hong Kong.

Last night Japanese forces attacked Guam.

Last night Japanese forces attacked the Philippine Islands.

Last night Japanese forces attacked Wake Island.

And this morning the Japanese attacked Midway Island.

Japan has, therefore, undertaken a surprise offensive extending throughout the Pacific area. The facts of yesterday and today speak for themselves. The people of the United States have already formed their opinions and well understand the implications to the very life and safety of our nation.

As commander in chief of the Army and Navy I have directed that all measures be taken for our defense. But always will our whole nation remember the character of the onslaught against us. . .

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

Tom Vaughn
Director of Operations