## Manager's Report for October 2015- September 2016

South Indian River Water Control District is a special taxing District that encompasses 12,000 acres including Jupiter Farms, Palm Beach Country Estates, Jupiter Park of Commerce, and Egret Landing. Over 7,000 residents call this place home.

The District's storm water discharge system essentially functions as a dual basin system. Palm Beach Country Estates, Jupiter Park of Commerce, and Egret Landing are east of South Florida Water Management District's (SFWMD) Canal 18. On the east side there are 15 miles of canals, mostly in Country Estates, that drain west to east through four set weirs prior to entering the Florida Turnpike's East Borrow Canal system. Waters are then routed towards the Southwest Fork of the Loxahatchee River. Jupiter Farms is west of the SFWMD's Canal 18. On the west side there are 45 miles of canals that also drain west to east through five water control structures to the District's Canal 14, then North to the Northwest Fork of the Loxahatchee River. During heavy rainfall events, we receive assistance from SFWMD to drain excess water through Canal 18 by way the of SFWMD's G-92 structure.

Day to day operations include Road Maintenance, Mowing, and Water Control. Operational staff includes nine heavy equipment operators, one mechanic, and two office personnel. Equipment includes two motor graders, two combination backhoes, three boom mowers, three tractors, four batwing mowers, one trackhoe, one mini excavator, two dump trucks and four fleet vehicles. Other areas of maintenance that are subcontracted include aquatic weed control, repair and restoration for paved roads, major canal construction, tree service, and park maintenance.

The District grades on average over 100 miles of dirt roads every week. Throughout the year, roads are monitored, and when needed, material is brought in to restore road surfaces. This year, we made improvements to main feeder roads in Jupiter Farms and Country Estates. These roads were re-contoured, crowned, and capped with DOT approved shell rock. "Crowning" the road is a method we use to provide proper stormwater runoff and minimize standing water which can create ponding and deterioration.

There are approximately 50 miles of District roads that are paved with Asphalt or Open Graded Emulsion Mix (OGEM), which is a cold-mix asphalt base. Paved roads are inspected each year, and when needed, re-surfaced with asphalt, micro overlay or fog seal. This year, four miles of existing OGEM roads were re-surfaced with micro, and another four miles with fog-seal application. The District does not pave roads. All paving projects are initiated by the landowners.

Our mowing operation includes 60 miles of canals and 378 miles of roadside swales and outfalls. It takes an average of six to eight weeks to complete the mowing schedule, with June through October being the busiest months. For those landowners who choose to mow their own swale easements, the District started a "Do Not Mow" list. This list is checked by the operators each day to ensure that these properties are bypassed by our machines. However, if a property on the list is not maintained, the operator will mow the easement and attempt to contact the landowner. If you are interested in getting your property on this list, please call the office.

There have been significant changes in our drainage program this year. But first, I want to take you back to 1996 when I started with the District. A lot has changed in my 20 years here, and most notably, the landscape. Back in 1996, there were numerous vacant lots that acted as retention areas for drainage. The elevations of some of these lots were low enough to collect water from neighboring properties that had been developed. As the District population grew and more and more of these vacant properties were developed, the topography of the land changed. This became evident this winter, when we recorded 31.48" of rain. Through that period, we received numerous calls regarding poor drainage and were able to trace the problem to the fact that these former vacant lots were no longer acting as retention areas for stormwater drainage. Now, stormwater may be directed onto properties that in the past never had a drainage issue. Something else became evident during this time, and that is the importance of having fully functional drainage swales and driveway culverts.

As part of the District's secondary drainage system, swales were designed to collect stormwater from roads and properties. The swales have three main functions; drainage, retention, and percolation. As I mentioned earlier, there are 378 miles of roadside and outfall drainage swales in the District. Within the swales we estimate about 10,000 driveway culverts have been installed, most in the 80's and 90's. Most of these culverts are corrugated metal with a lifespan of about 25 years. Knowing this, we could see a potential problem with the District's secondary drainage system. These issues were discussed by the Board of Supervisors and in March of this year, the Board passed a policy to implement a Driveway Culvert Replacement Program. This program allows the District to install culverts on District roads for the landowners at a cost of \$300.00. This fee includes the culvert, rip-rap headwalls, and sod along the culvert ends. A few months later, with the approval from Palm Beach County, the Board approved a policy to install driveway culverts on County roads at a cost of \$750.00. This fee includes a County approved 24" mitered end culvert with poured concrete end-walls. These new policies accomplish many goals. First, the cost is very affordable. Many residents complained that it was too expensive to replace their inoperable culverts. Second, installation of the culvert and headwall are done according to District specifications. Third, the culvert is set at the proper elevation for drainage. Fourth, we learned that a majority of landowners did

not know the culvert was their responsibility to maintain. Installations allow us to distribute a brochure detailing what needs to be done to properly maintain the culvert. And finally, it's an opportunity for us to inspect the drainage area as a whole, and make improvements if needed. To date, we have installed 91 culverts with 26 more scheduled through November 7<sup>th</sup>. We feel over time, this will have a positive impact on the District's drainage system. If you would like more information about this program, you can go to our website www.sirwcd.org.

In addition to the District's day to day operations, we interact with agencies and municipalities who also serve the community. They include Palm Beach County Road and Bridge, Palm Beach County Sheriff's Wildland Taskforce, Palm Beach County Fire and Rescue, South Florida Water Management District, Solid Waste Authority, Town of Jupiter, and The Loxahatchee River District. The District also participates as committee members with the Florida Association of Special Districts, The Loxahatchee River Coordinating Council, The Loxahatchee River Preservation Initiative, and The Safety Council of Palm Beach County. These interactions ensure good relationships with governmental department heads to provide service and information within the District.

One agency that has provided much needed support has been the Wildland Taskforce. According to Florida Statutes, unauthorized motor vehicles are prohibited on District canal right-of-ways. Trespassing by vehicles creates a liability for the District because there is potential for property damage, injuries or even fatalities. Unauthorized vehicles also degrade the quality and integrity of the canal banks and the quality of adjacent natural lands. These vehicles are subject to citations and confiscation if apprehended. If you notice any type of vehicles on the canals, please call the local Sheriff's Office.

This year, District employees participated in educational and safety programs, sponsored by Florida Department of Environmental Protection and Safety Council of Palm Beach County. They also attend regularly scheduled safety meetings held at the District work center. This year, Superintendent Greg Gell, and Operator Arie Raz completed the "Stormwater Erosion and Sediment Control Inspector Training Program". This course is logged as a part of our annual report for the National Pollutant Discharge Elimination System (NPDES). (The NPDES report also includes inspections of illicit discharge in the District's drainage system, structural inspections of canal culverts, flood control structures, and weir structures, and field reports for construction projects.) Also, several employees received certificates for completion of a First Aid and CPR course and some attended the seminars, "Back Talk" and "Heat: Effect on Workers". We are also very proud to have received two awards from the Safety Council for outstanding achievements in driver and employee safety.

The District receives numerous calls requesting services that we do not provide. The most frequent request is landscape debris removal. Solid Waste Authority is responsible for debris

pick-up. The debris needs to be properly cut and placed in front of your property before they will pick it up. Solid Waste will not pick up debris in front of vacant lots, and they do not transport tree stumps. Remember, it is illegal to dump any kind of trash onto District right-of-ways, or any type of illicit discharge that could enter the Districts drainage system. If you notice any of these illegal activities, please call our office at 561-747-0550.

The District office is open Monday-Friday between the hours of 8:00 am-4:30pm. Please call or stop by if you have a question or concern regarding road or drainage issues. We will be happy to assist you.