

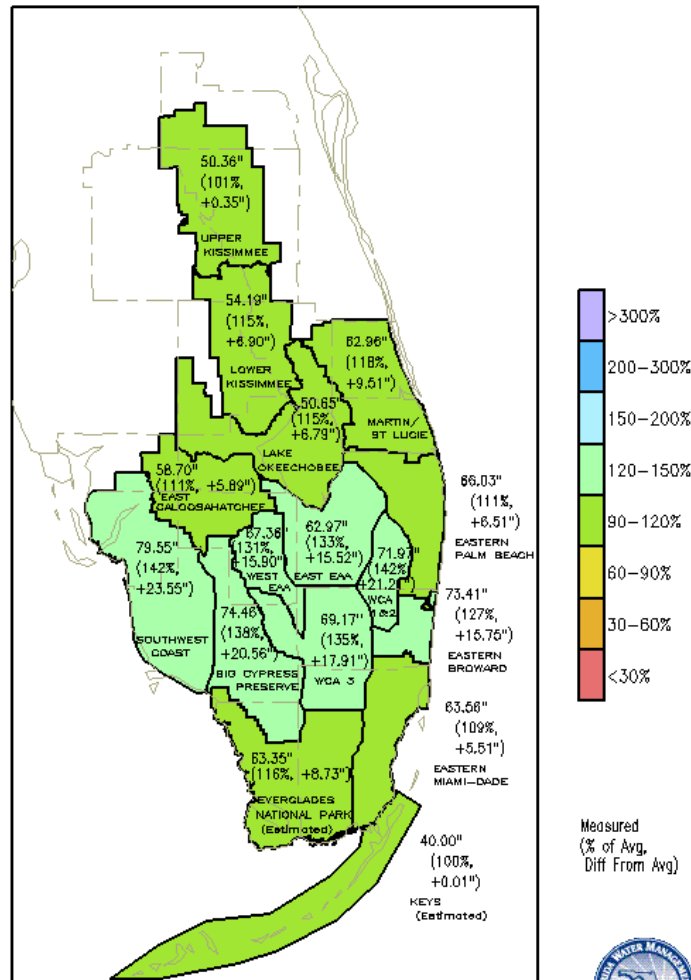
2017 Report to District Landowners

Robert M. Brown, Executive Director
January 10, 2018



2017 Weather Conditions

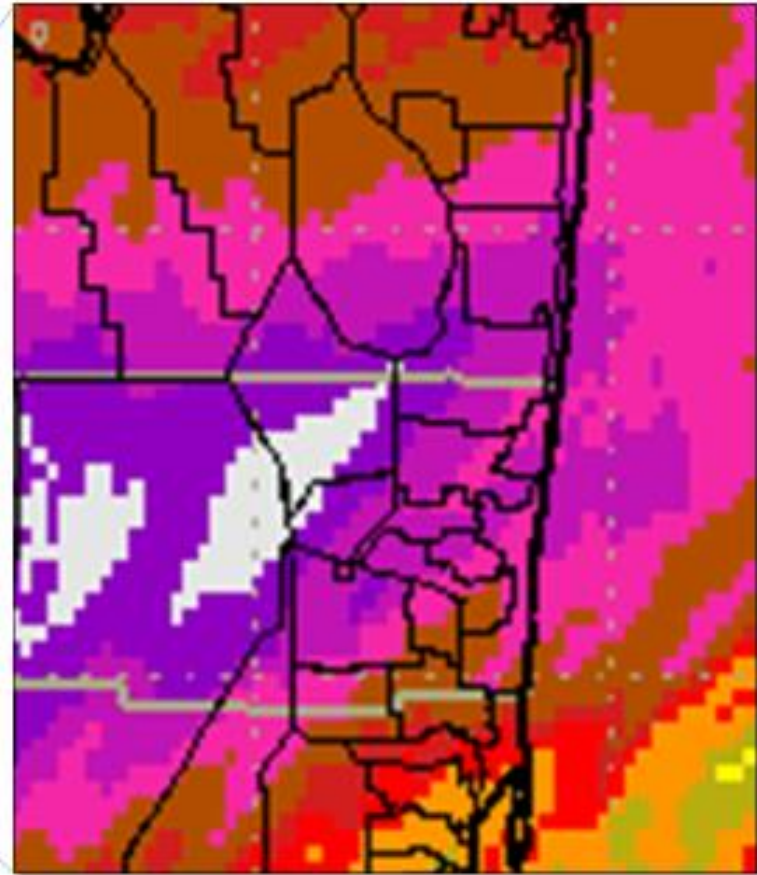
SFWMD Rainfall
02-jan-2017 to 01-jan-2018



DISTRICT-WIDE: 63.68" (123%, +11.85)



- Received 66.03 inches total rainfall; 6.51 inches above average
- Received 6-15 inches of rain during June rainfall event
 - Local street flooding experienced in southwest portion of District



June Rainfall Event Boca Chase



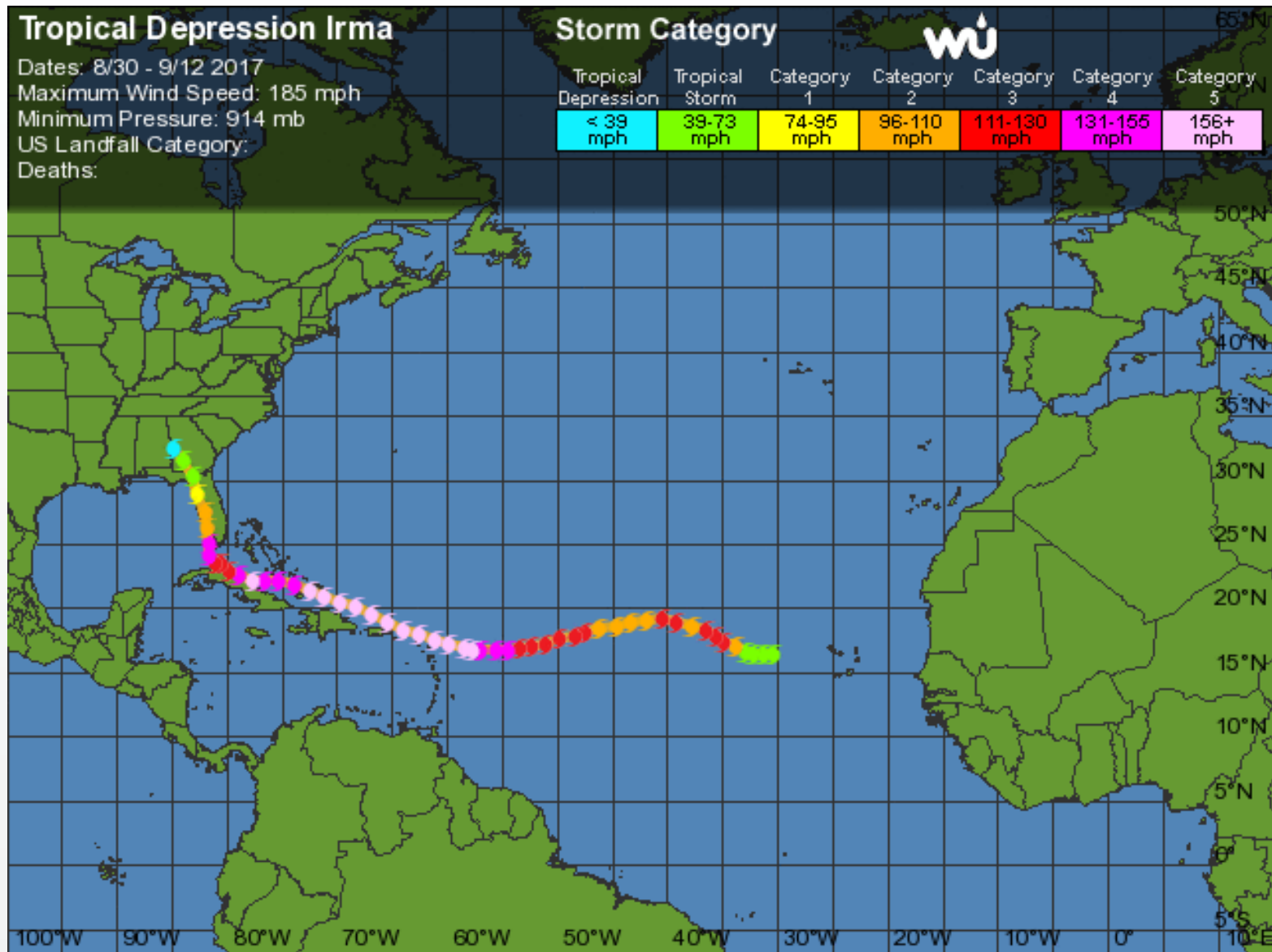
June Rainfall Event Boca Green



June Rainfall Event Saturnian



Hurricane Irma – September 2017



Statewide Damage



Hurricane Impacts



Florida Keys

Hurricane Impacts



Miami

Hurricane Impacts



Tampa



Jacksonville

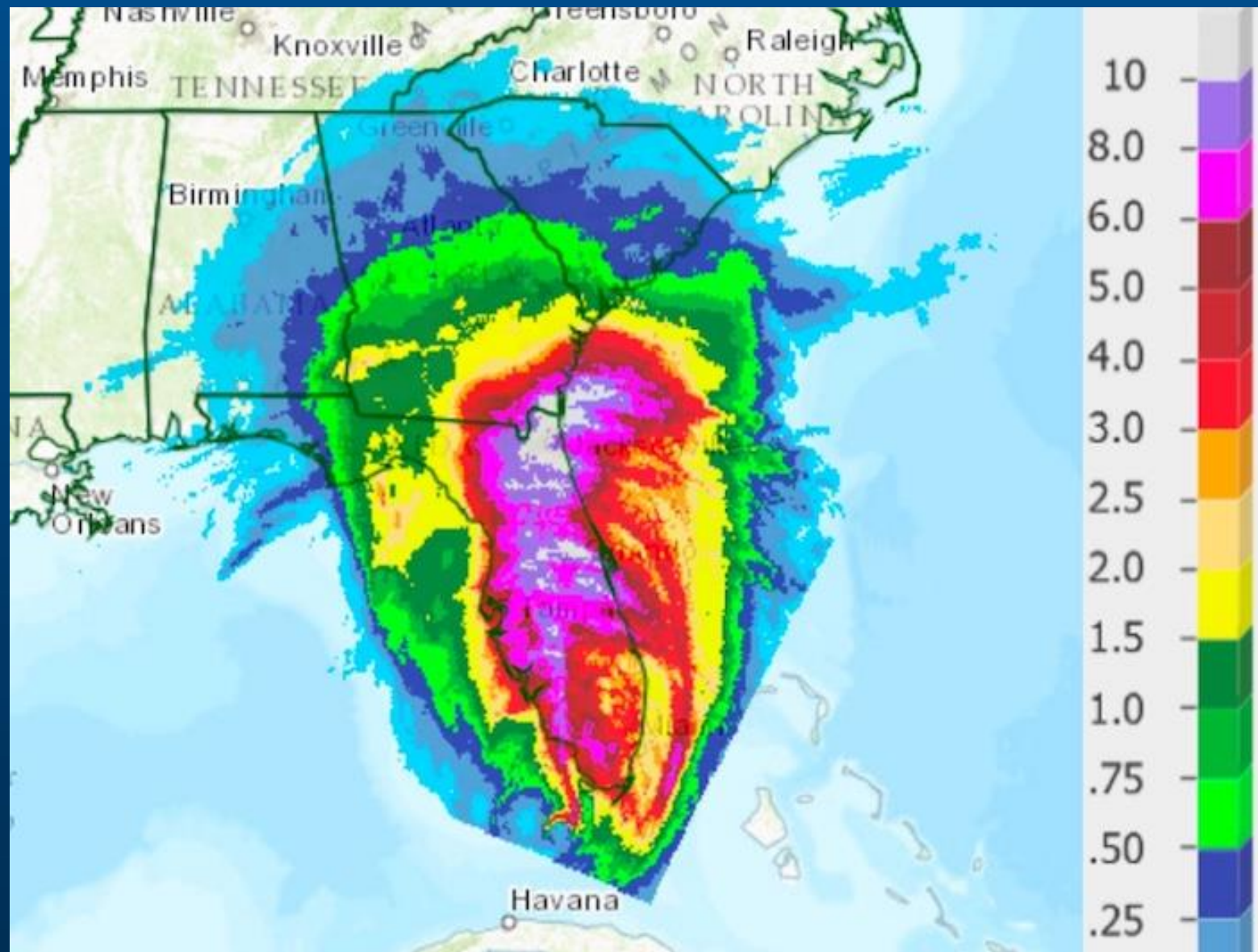


Bonita Springs



Ft. Lauderdale

Statewide Storm Total Rainfall



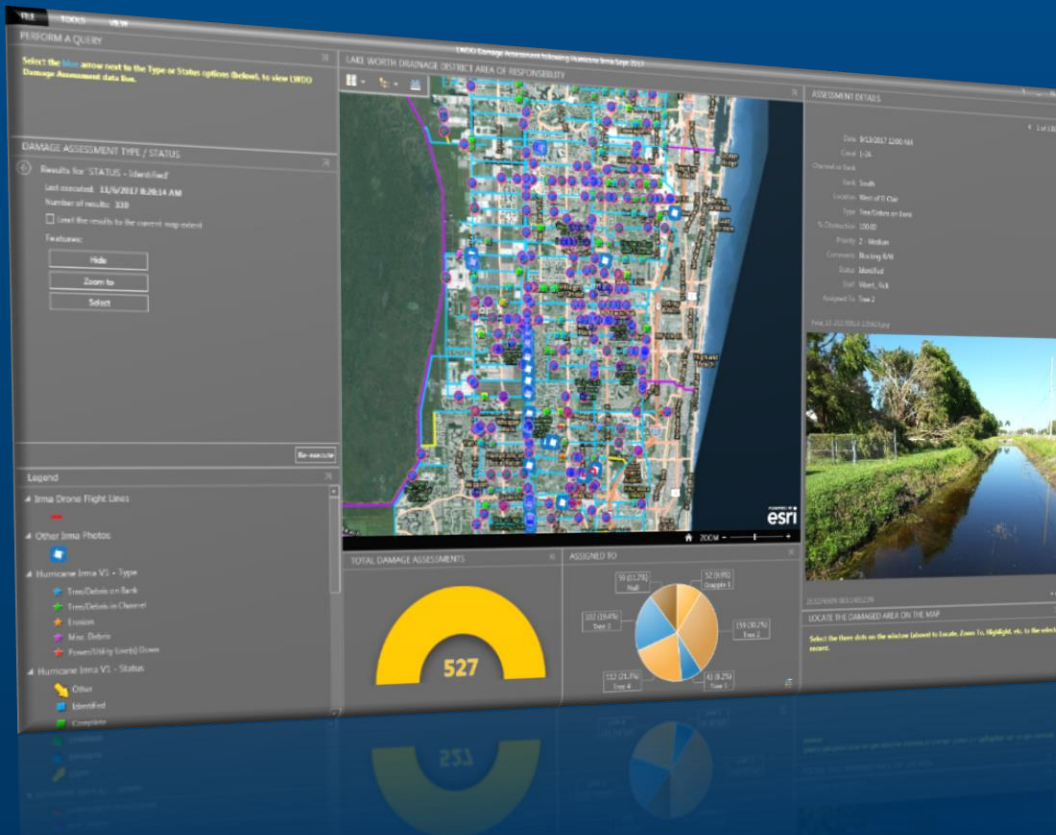
LWDD Preparation & Response



- Began lowering canal network on September 6 with gates fully open by September 8
- Authorized communities and businesses to open operable gates on September 7 & 8
- Monitored water levels via remote-located sensors throughout event
- District staff successfully executed emergency plans
 - Public information distributed – emails, website and social media
 - EOC activated – tracked storm event, managed public inquiries, inventoried storm damage, managed storm recovery response



Hurricane Irma Recovery



- Created application and dashboard to collect and report data on storm damage
- Over 500 sites identified requiring debris removal
- Prioritized removal of debris in canals and significant right-of-way blockages
- Most debris removed by year-end
- **All recovery efforts conducted by District staff**

E-3 Canal – North of Linton Blvd.



E-3 North of Linton Blvd. A couple more similar on this stretch



L-11 Canal - West of Turnpike



L-7 Canal - East of Jog Rd.



L-27 Canal - West of Congress



L-28 Canal - West of El Claire



L-28 West of El Claire

2017/09/11

L-29 Canal - East of Military (Before)



Before



After

L-29 Canal - Between Lyons and E-1



L-30 Canal - West of 441 South Side



L-32 Canal - Starky to Smith Sunday



L-32 Several like this
from Starkey to
Smith Sundy

2017/09/11

L-35 Canal - East of Lyons



E-1 ½ Canal - North of SW 18th Street



L-2 Canal - Oswego Avenue

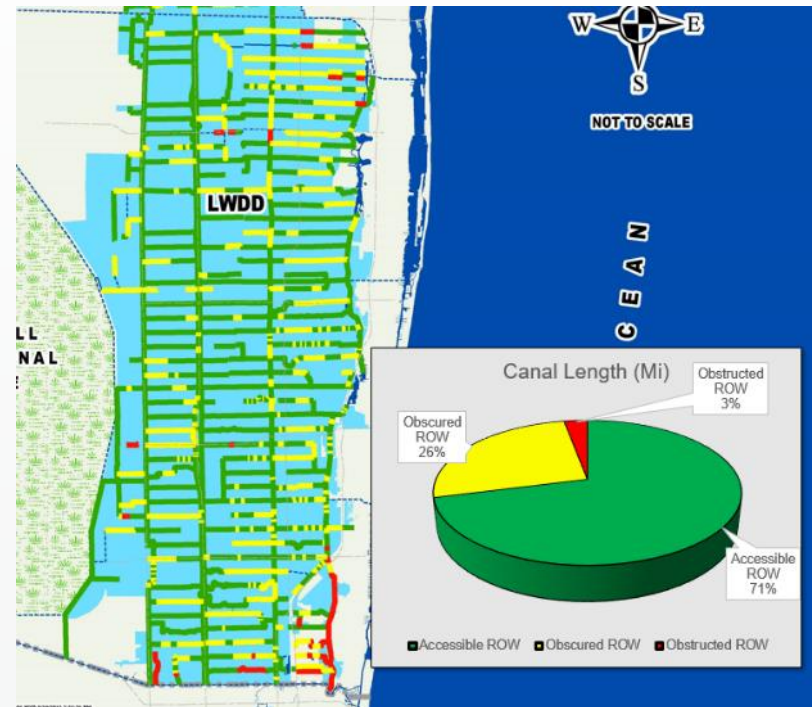


Canal Rehabilitation Program



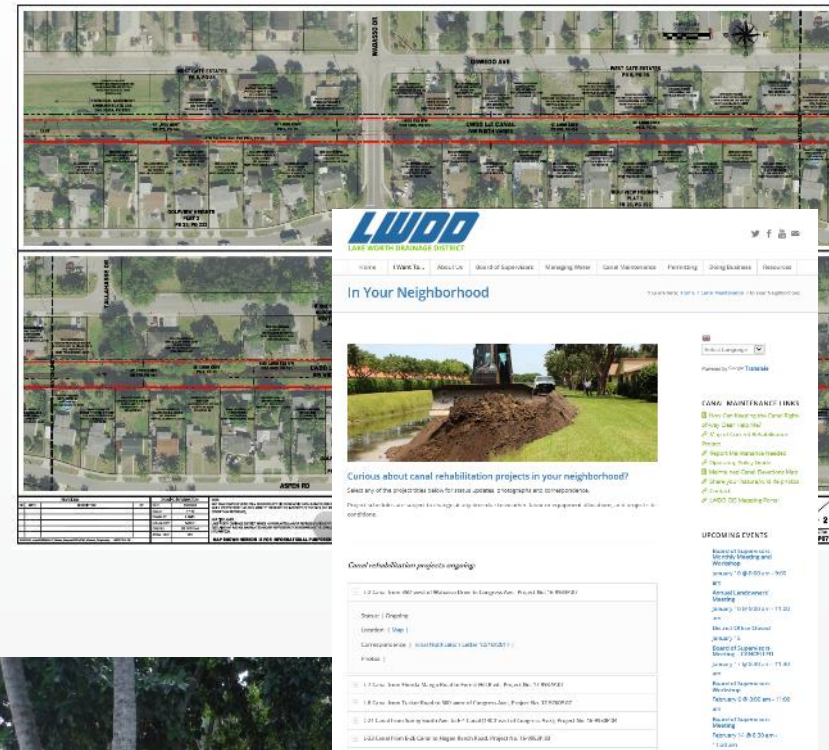
Canal Rehabilitation Program

- In late 2015, a comprehensive analysis was conducted to identify encumbered rights of way
- Approximately 150 miles encumbered
- Majority of projects provide significant challenges due to access and structural encumbrances
- In 2016, developed coordinated program and committed resources to accelerate efforts with goal to eliminate stop/start, interruptions to allow efficient clearing
- Prioritized projects; canals closest to key water control structures and equalizer canals highest priority



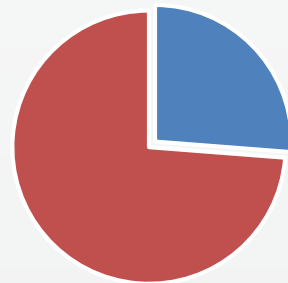
Canal Rehabilitation Program

- Research, mapping, noticing, staking and removal underway
 - Distributed notification letters for 48 projects (+/- 200 letters per project)
 - Finalized right-of-entry / hold harmless agreements for 32 projects (multiple per project)
 - Created 34 maps for individual projects identifying District ownership
 - Staked 20 miles of canal
 - Ongoing updates of projects on District website



Canal Rehabilitation Program

- Storm recovery would have been much more intensive if not for completed canal rehab projects to date
- Cleared 39.34 miles since October 2015
- Cleared 26.71 miles in the past 12 months
 - LWDD – 14.69 miles
 - Contracted Services – 9.24 miles (\$630,785)
 - Developer / Third Party – 2.78 miles
- Exceeded 20-mile goal!



■ Completed ■ Remaining

E-4; South of the L-18 Canal (Thompson Rd)



E-1WS; Hillsboro to SCRP (1.46 mi)



E-3¹/₂-2; South of Spanish River (0.46mi)



E-3¹/₂E; L-30 to L-29 (0.38 mi)



E-3; Lantana Rd to L-15 (0.80 mi)



E-3; Clint Moore to L-39 (1.44 mi)



E-3; Clint Moore to L-39 (1.44 mi)



E-3; South of L-48 (0.22mi)



E-3; North of L-1 to South of L-2 (0.58 mi)



E-4; Congress Ave to L-38 (0.25 mi)



E-4; Lake Worth Rd to 2nd Ave (0.13mi)



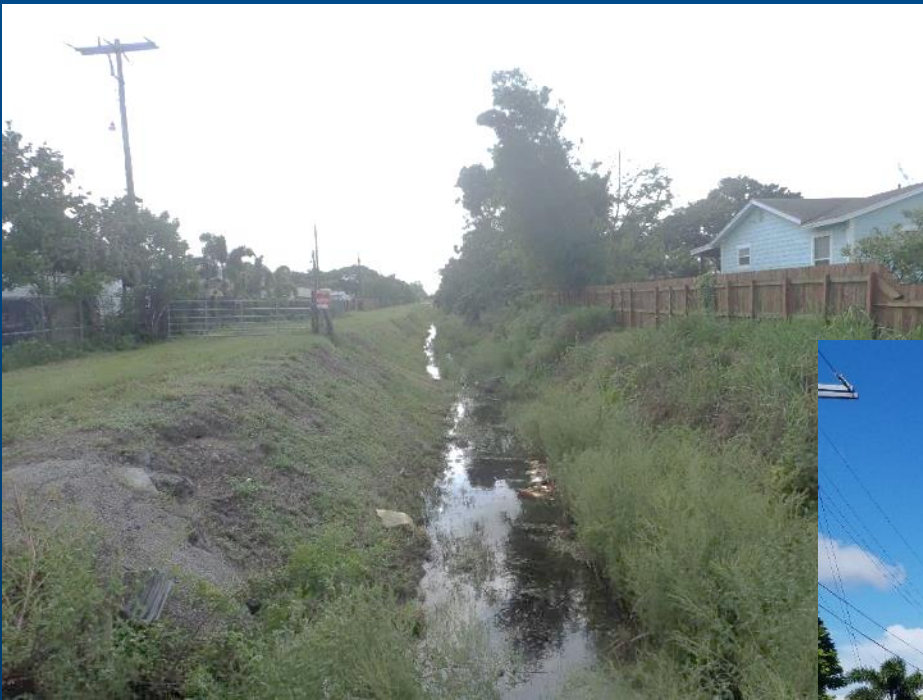
E-3; Lake Worth Rd to L-10 (1.00)



E-4; L-38 to Linton (1.02 mi)



L-1; Drexel Rd to E-3 (0.50 mi)



L-2; Jog Rd to E-3 (1.03mi)



L-3; Mayacoo to Sansbury Way (0.34 mi)



L-4; East & West of Cleary Rd (0.34 mi)



L-4 ;95th to Fairgrounds Rd (0.13 mi)



L-9; East & West of Kirk (0.43 mi)



L-14; east of Lyons (0.19 mi) Developer Clearing



L-16; East of E-2E (0.29) Developer Clearing



Homeland (L-16W); West of SR-7 (1.00 mi)



L-16; West of Military Trail (0.28 mi)



L-20; Hagan Ranch Rd to Jog Rd (0.53 mi)



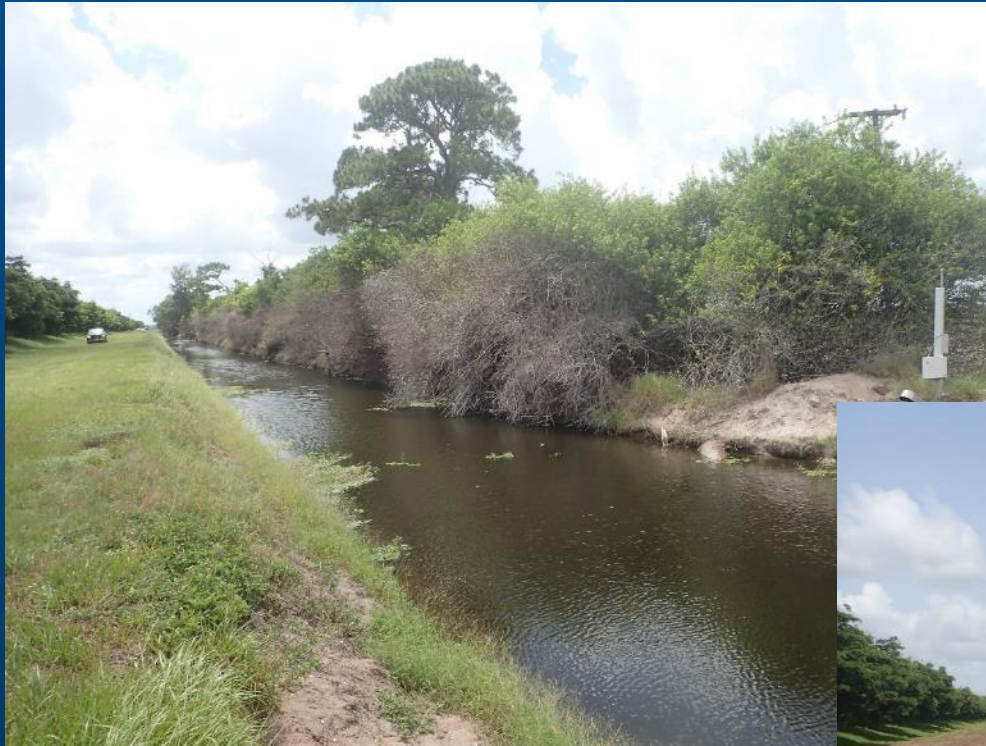
L-22; east of Lawrence (0.16mi)



L-23; East of SR-7 (0.53mi)



L-25; Acme Dairy Rd to E-2W (0..45mi)



L-25; Lawrence to east of Knuth (0.57 mi)



L-30; Lyons Rd east (0.50mi)



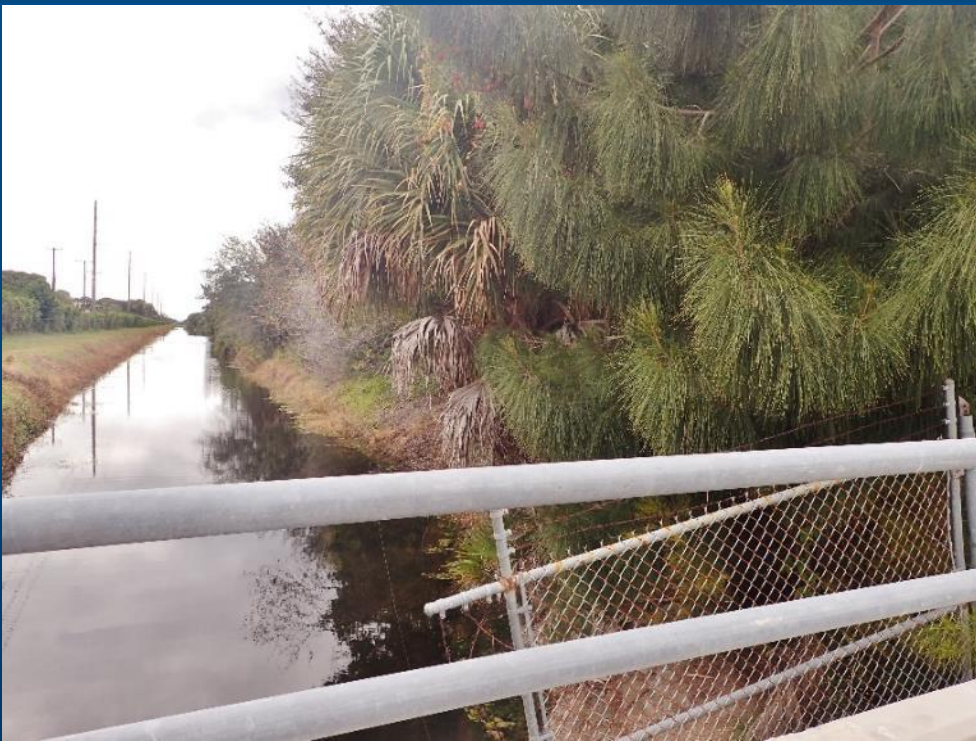
L-31; Starkey Rd to E-2W (0.32mi)



L-33; Smith Sundry to E-2W (1.25mi)



L-35; East & West of Sims Rd (1.00 mi)



L-35; East & West of Sims Rd (1.00 mi)



L-38W; S-11 to SR-7 (0.77mi)



L-39; West of E-3 (0.79mi)



L-43W; West of Coral Ridge Dr (0.15mi)



L-43; E-3 to Military (0.50 mi)



L-44; E-1 to west of Lyons Rd (0.70mi)



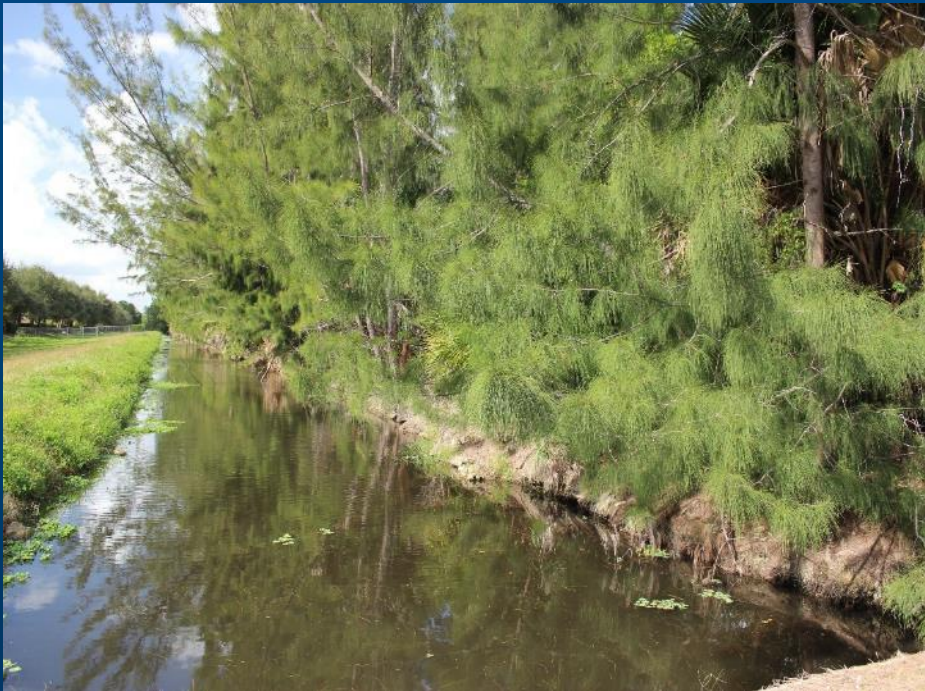
L-47; West of Boca Rio Rd (0.14mi)



L-40E; E-4 to I-95 (0.59 mi)



S-7; 1700ft w/o Forest Dale (0.34 mi)



7176 Thompson Rd

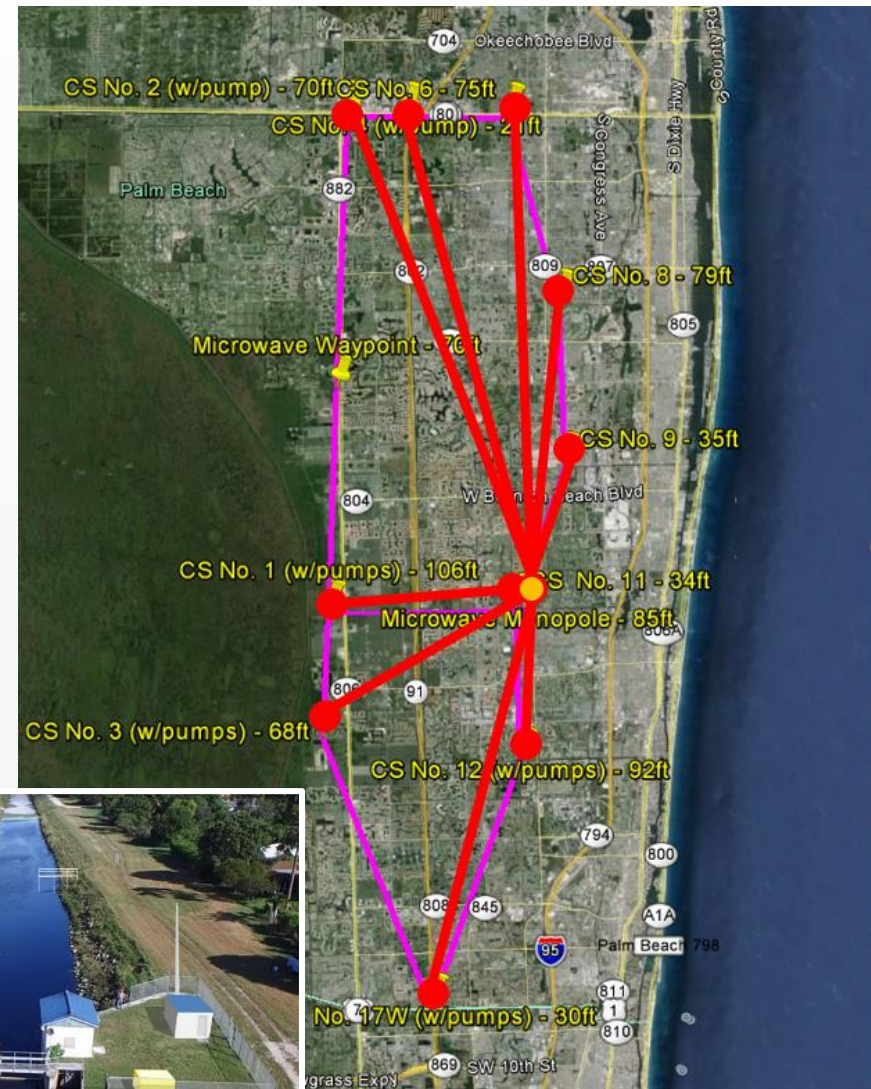


Capital Improvements



Capital Improvements SCADA and Electrical Improvements

- SCADA project will automate water control operations at 9 sites and provide 'real time' data to make instant water supply and flood control decisions
- Construction initiated in February 2017 and completed at 7 sites
 - Sites tested and functioning locally
- Control Structures 11 & 12 scheduled for completion in Feb '18
- Central communication and final site work scheduled for Feb '18



SCADA & Electrical Improvements Underground & Conduits



SCADA & Electrical Improvements Walkways & Staff Gauges



SCADA & Electrical Improvements Antenna Towers



SCADA & Electrical Improvements Control Panels



SCADA & Electrical Improvements Pre-Fabricated Buildings



SCADA & Electrical Improvements Central Towers & Communications





	Underground	Walkways and staff Gauges	Antenna Tower	Emergency Generator	Pre-Fabricated Buildings	Electrical Upgrades	SCADA Control Panels	Local Control	Central Communications	Site Work and Final
CS#1										
CS#2										
CS#3										
CS#4										
CS#6										
CS#8										
CS#11										
CS#12										
CS#17W										

Capital Improvements Infrastructure Refurbishment

- Completed replacement of three radial gates for Control Structure 11 (L-30 Canal)



Canal Maintenance



Canal Maintenance Mowing

- Mowed 620 miles of canal rights-of-way; totaling ~3,500 miles
 - Flat mowing - ~546 miles, 4x per year
 - Slope mowing - ~428 miles, 3x per year
- Pilot program for contracted mowing services on E-2W expanded to include E-2E and C. Stanley Weaver Canals
- Future cost savings estimated at >\$30K annually; two mowing crew positions redirected to tree crew for accelerated tree removal



Canal Maintenance Vegetation Management

- Ongoing treatment of aquatic and terrestrial vegetation to maintain 500 miles of canals and 1,000 miles of associated rights-of-way
- Increased upland treatment and management of canal banks following completion of tree removal projects (approx. 40 miles)
- Installed an additional 45 heavy-duty booms to manage aquatic weeds and trash; 110 boom sites throughout District canals



Canal Maintenance Vegetation Management

- Implemented ChemicalSafety software to catalogue and track chemical inventory
 - Eliminates physical tracking
 - Inventory is immediately updated and accessible to staff
 - Enhances management of inventory; timely procurement
- Implemented GPS tracking of treatment operations



Canal Maintenance Other Activities

- Ongoing dredging of canals to maintain conveyance and remedy shoaling
- Expanded access gate installations at arterial or collector roads and local roads where warranted; reducing interior gate installations
- Began inventory of abandoned /unauthorized pipe installations and removal as necessary



Fleet Maintenance

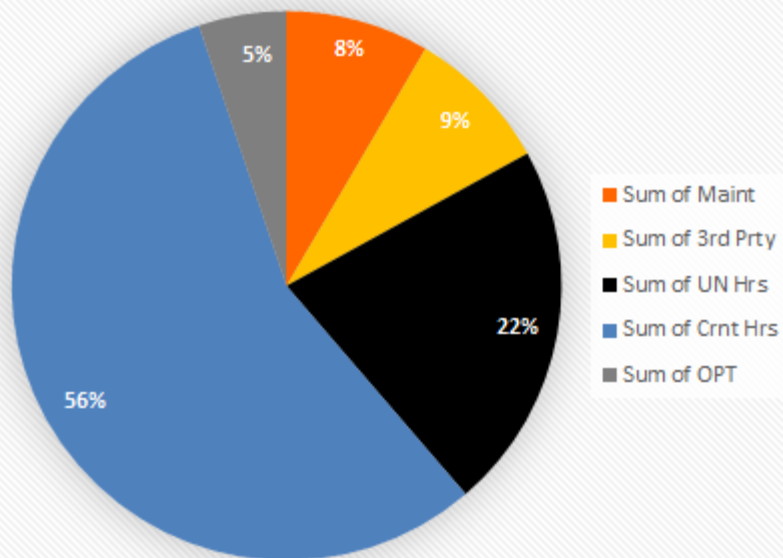


- District staff maintains a fleet of:
 - 63 vehicles
 - 19 machines / heavy equipment; 5 mulching heads
 - 11 tractor mowers
 - 6 boats
- Implemented tracking and quarterly reporting of equipment usage

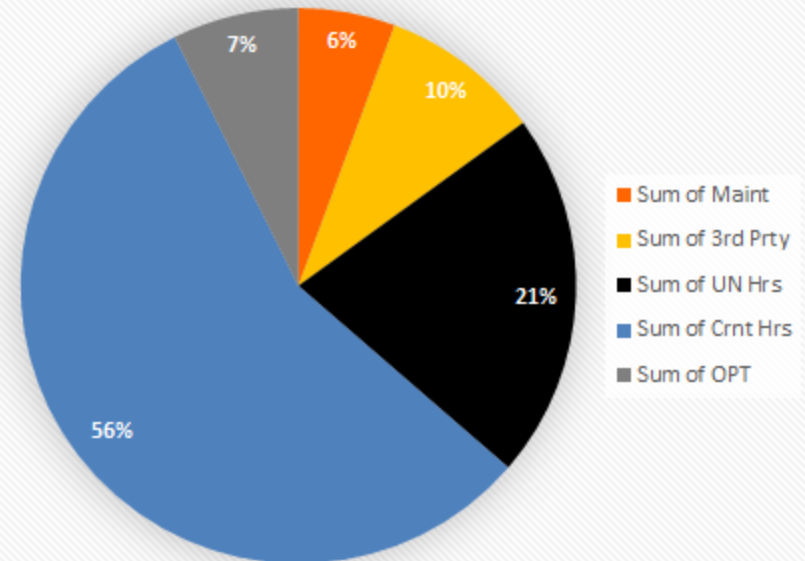


Equipment Utilization

**Heavy Equipment Utilization
January – December 2017**

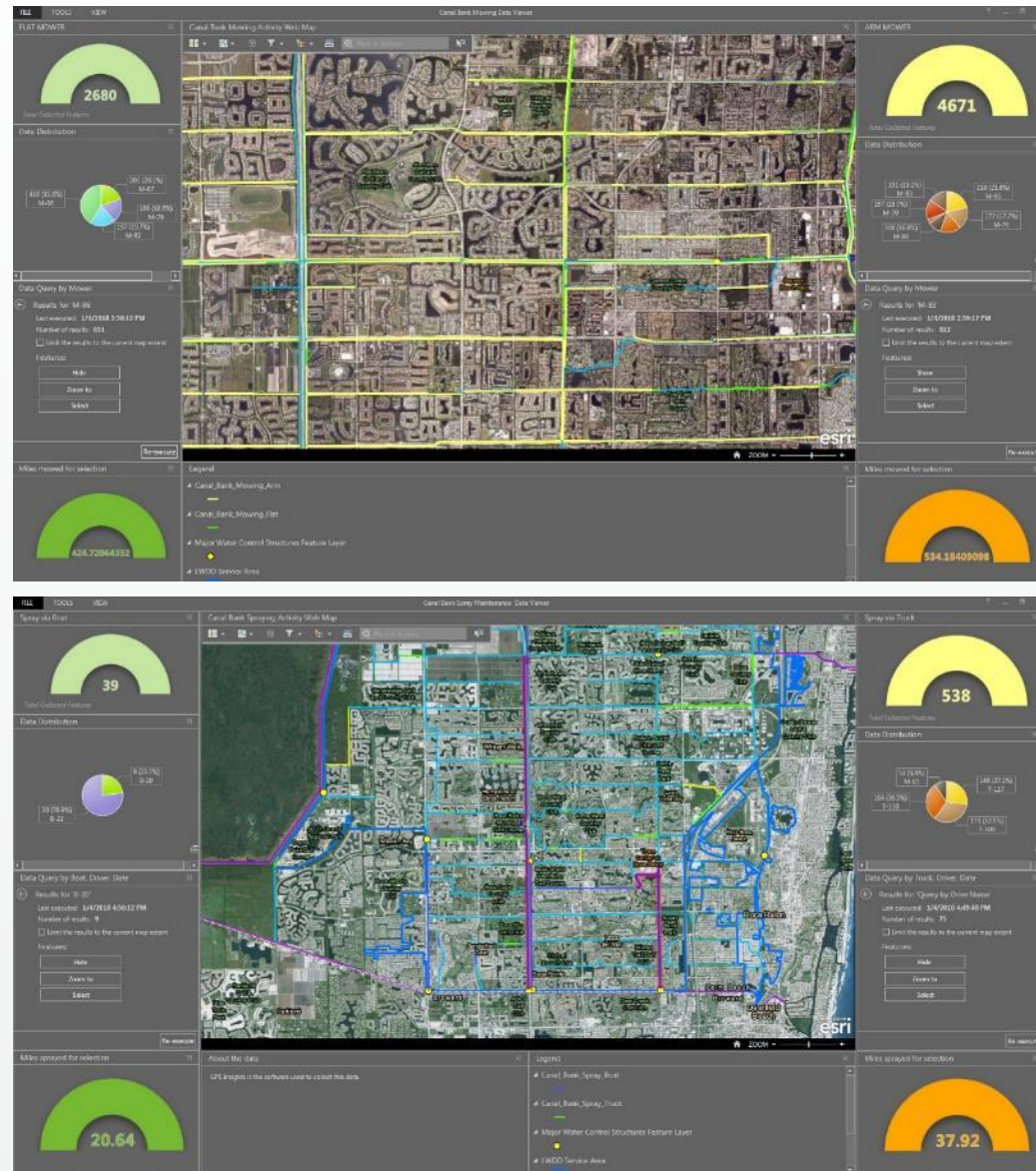


**Mower Utilization
January – December 2017**



Right-of-Way Management Maps and Apps

- Utilizing GPS Insight to track mowing and chemical applications
- Created several 'collector' applications for field staff to collect on-site data for availability of all staff
- Created operations dashboards to provide status on field activities



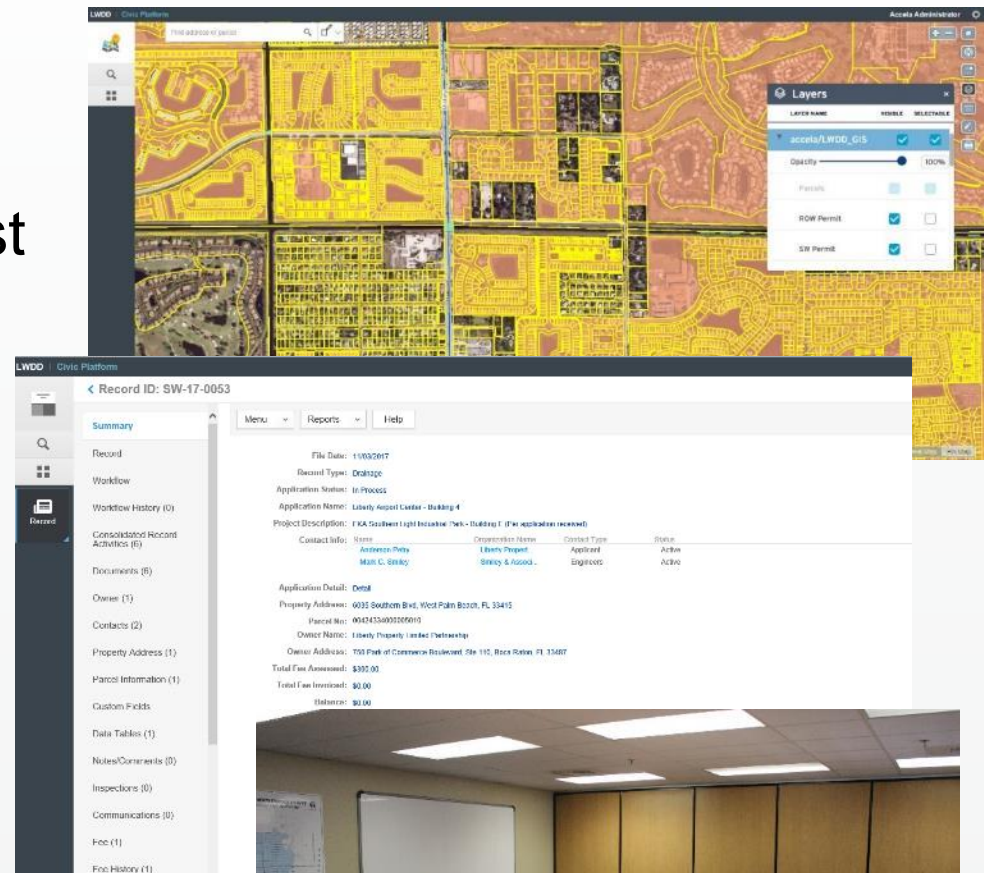
Right-of-Way Management

- Issued ~ 300 right-of-way and drainage permits
- Researched and responded to ~2,200 Chancery Case 407 review requests
- Completed ~500 plat and development (DRO) reviews for county and municipality projects
- Initiated 146 enforcement cases; closed 108 cases

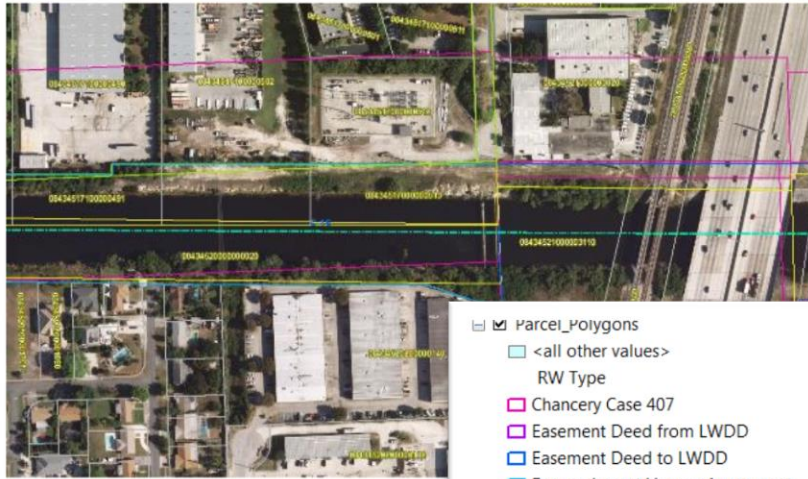


Right-of-Way Management Business Management Software

- Implemented Accela to streamline permit, compliance and land interest review processes
 - Permit applications
 - Inspections
 - Chancery Case and land interest reviews
 - Compliance issues
 - Service requests
- Trained staff and rolled out system in Summer 2017
- Initiating development of asset management in 2018



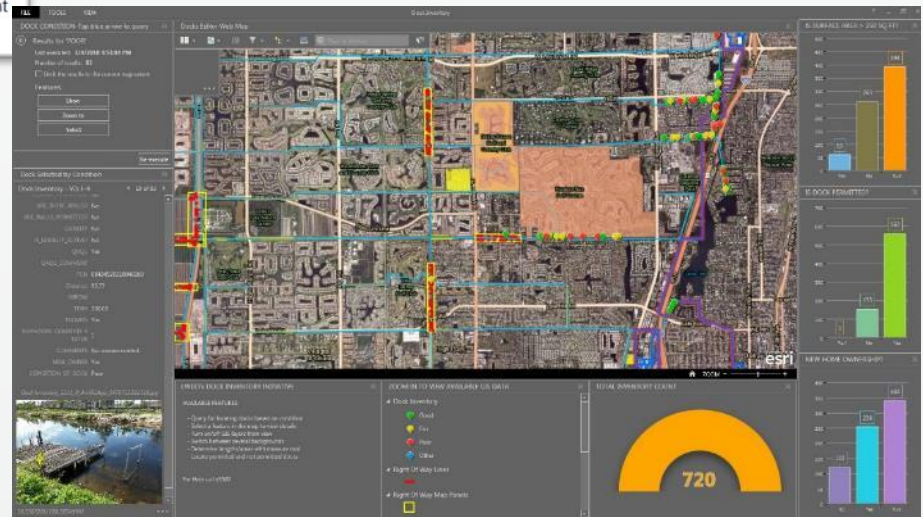
Right-of-Way Management GIS Maps and Apps



- ☒ Parcel_Polygons
- ☐ <all other values>
 - RW Type
 - ☐ Chancery Case 407
 - ☐ Easement Deed from LWDD
 - ☐ Easement Deed to LWDD
 - ☐ Encroachment License Agreement
 - ☐ Maintenance Agreement
 - ☐ Other
 - ☐ Ownership Deed from LWDD
 - ☐ Ownership Deed to LWDD
 - ☐ Piping, Paving and Parking License Agreement
 - ☐ Temporary Access License Agreement



- Completed mapping of 37,752 conveyance records
- Mapped 8,500 of 15,500 permit boundaries; 55% complete
- Completed inventory of docks on District canals



Right-of-Way Management UAV (Drone) Program

- Used to inspect canals and rights-of way, document projects (before and after), provide visual record of sites enhancing staffs ability to analyze site
- Saves time, travel and costs on rental equipment or helicopter to capture equivalent aerial imagery
- Began capturing 3D imagery (models) of facilities; provides accurate measurements within inches



Campus Improvements Security - Lighting



Campus Improvements Shop, Warehouse and Office Lighting



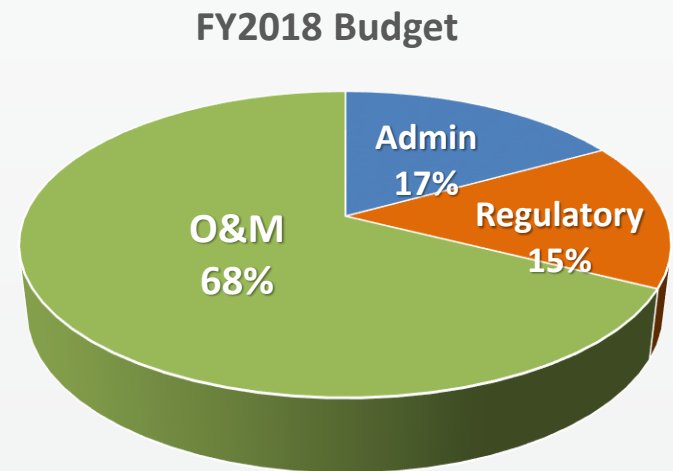
Campus Improvements Shop Building

- Completed exterior refurbishment of Shop building
 - Side panels, roofing, painting and installation of hurricane impact garage doors

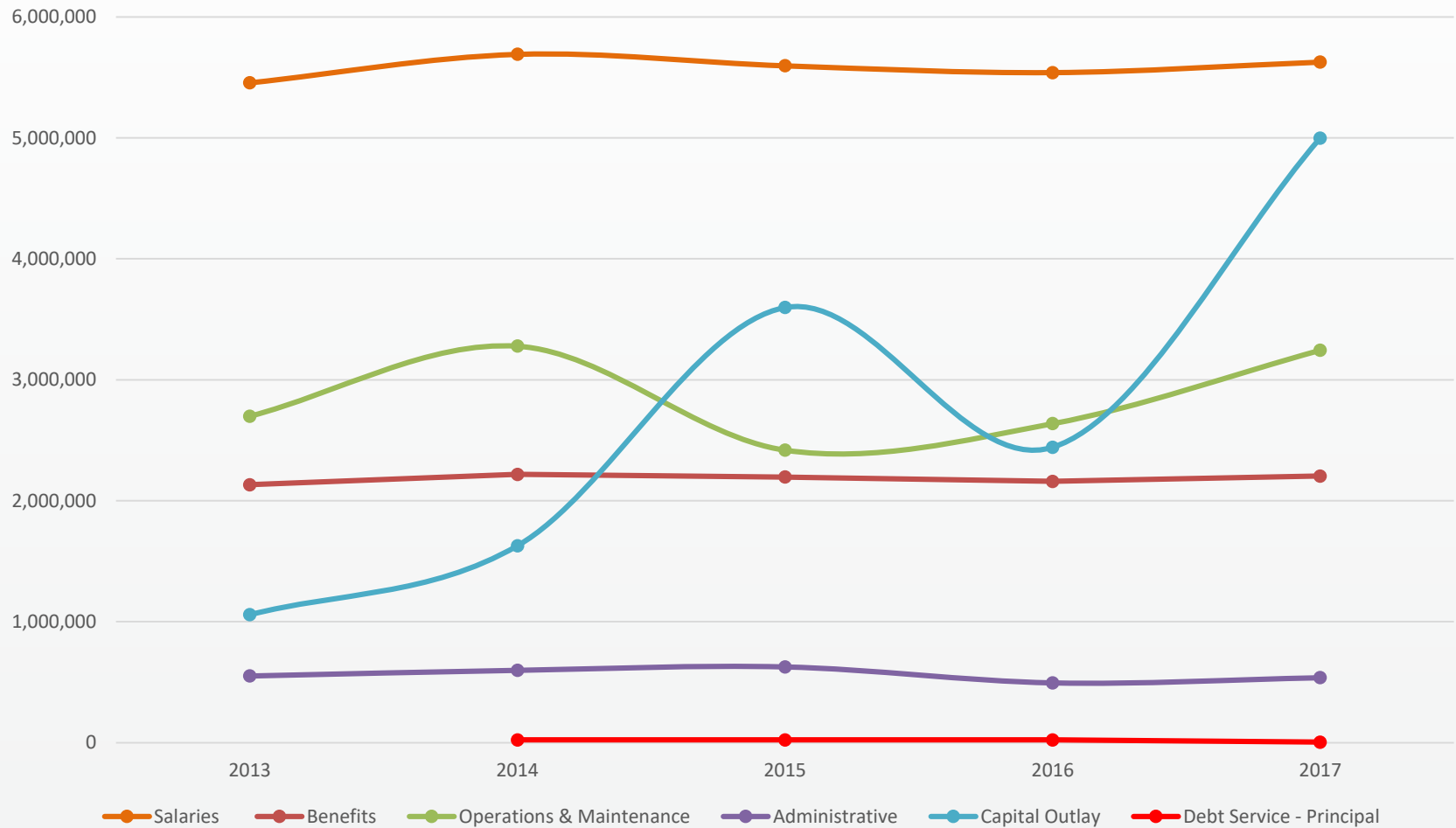


Financial Highlights

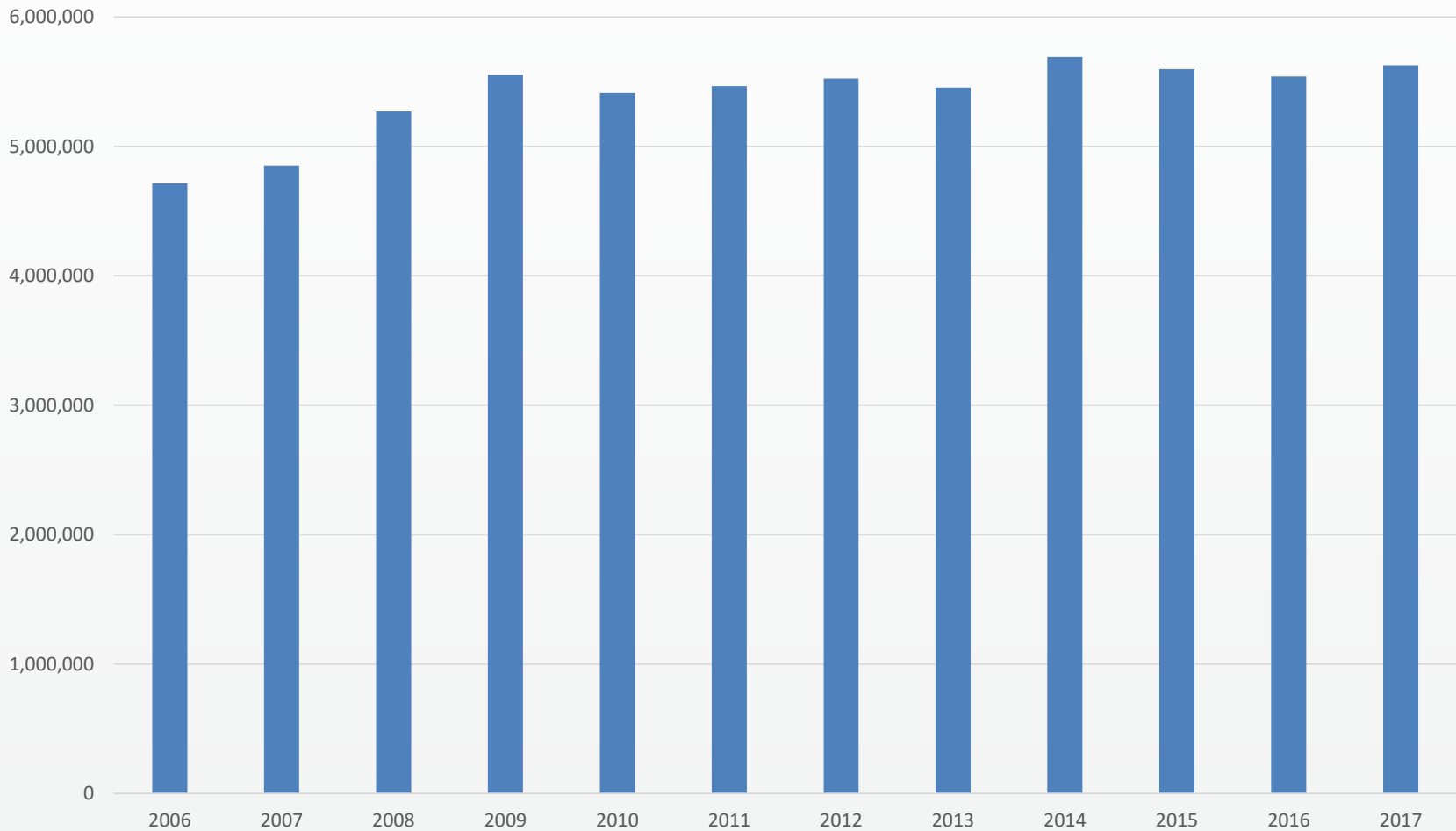
- Auditors issued unqualified opinion for FY2016; financial records and statements are fairly and appropriately stated in accordance with generally accepted accounting principals
- Adopted \$17.05 million budget; \$2.4 million dedicated for capital projects including SCADA, electrical improvements, design work on two structures and improvements to secondary structures
 - \$1.50 non-ad valorem assessment increase for accelerated canal rehabilitation (vegetation removal and encroachment demolition);
- Revenues received:
 - Permit fees - \$577,238
 - Sale of surplus lands - \$157,700
 - Quit claim deeds - \$3,500
 - ROW agreements (tower leases) - \$83,721
 - Online surplus auction (GovDeals) - \$65,962
- Implemented electronic routing/approval of purchase orders, invoices and payment vouchers; nearly all vendors paid via ACH to eliminate check processing and postage



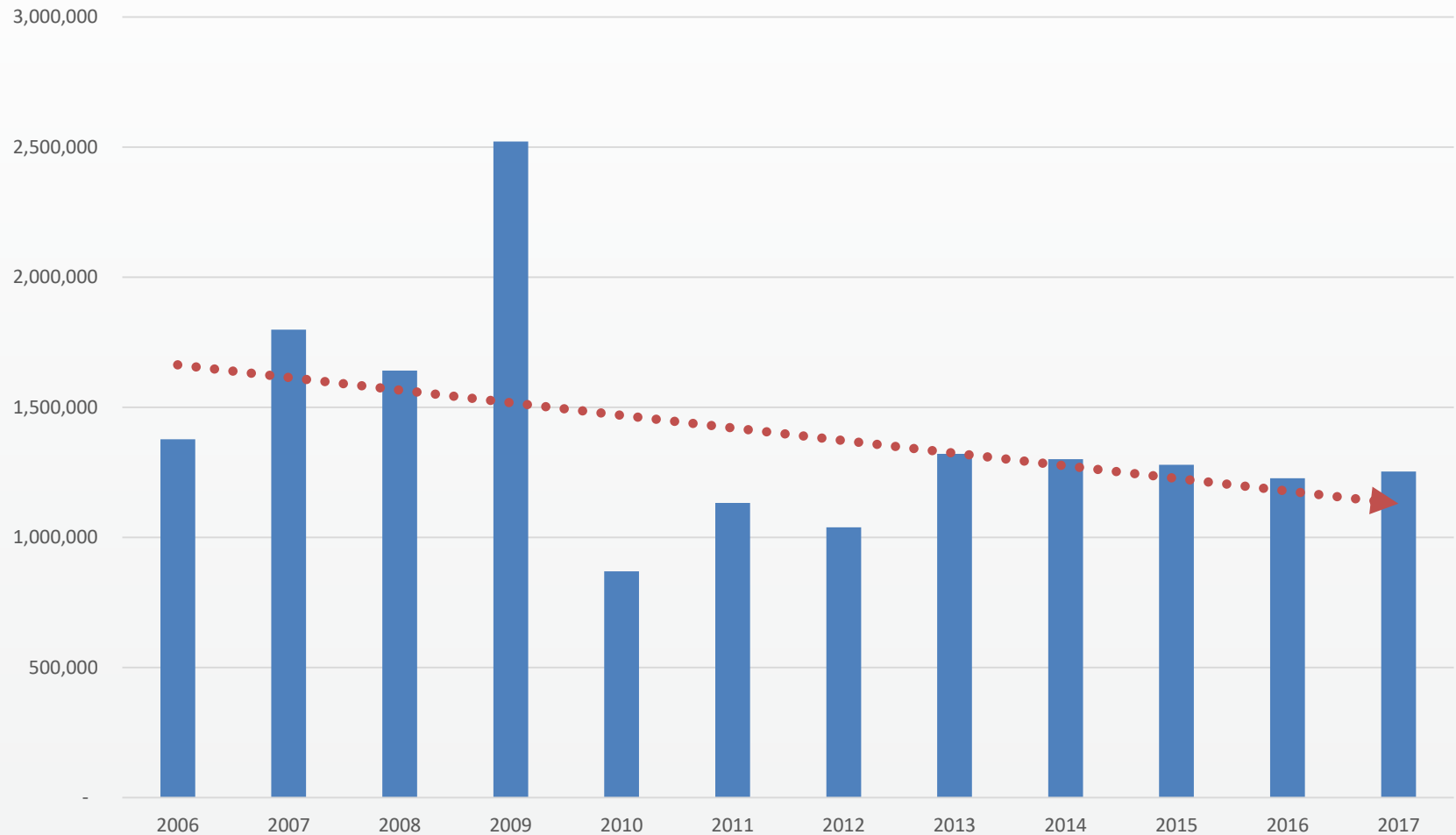
Expenditures



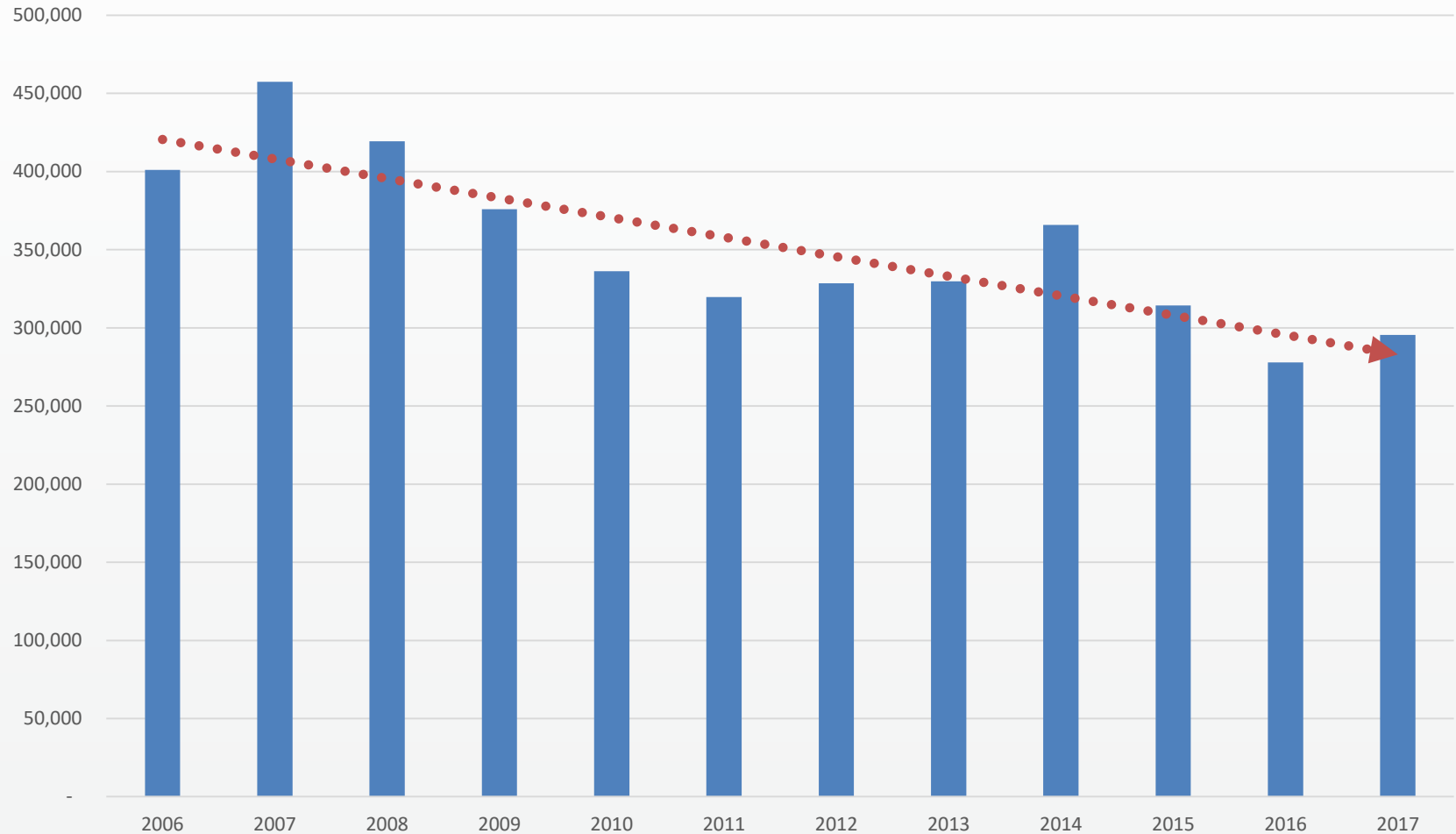
Maintained Salaries



Maintained Healthcare Costs



Maintained Property/Casualty Insurance Costs



- Continued focus on employee safety in the workplace
 - Forklift Operation & Safety
 - Excavator Operation & Safety
 - Tractor Operation & Safety
 - Lock-Out/Tag-Out
 - CPR/AED/First Aid
 - Defensive Driving
 - Safe Supervisor
 - Hazmat Level 2 & Level 5 Spill Team
- District workers compensation experience modification rate continues to fall below average



Outreach and Communication

- Responded 2,000+ constituent inquiries related to field activities; 50+ public record requests
- Hosted 2 workshops on storm readiness and lake management; 100+ property managers attending earned CEU credits
- Presented and attended multiple residential, civic and legislative groups
- Increased subscription of monthly newsletters, e-noticing and social media
 - 2,260+ parties receiving e-notifications and newsletters
 - 32,000+ website visits



Outreach and Communication Website

- Continued enhancement of District website and social media to communicate with stakeholders
- Hurricane Irma messaging for public and media
 - Pre-storm preparations and notifications
 - Storm recovery efforts and updates
 - Photos and videos
- Continued communication of canal rehab project status
- Addition of Spanish language materials



The screenshot shows the LWDD website with a prominent banner at the top right that reads "HURRICANE IRMA WE'VE GOT YOU COVERED". The website layout includes a navigation bar with links like Home, I Want To..., About Us, Board of Supervisors, and a "Videos and Photos" section. A large photo shows a canal cleanup operation with an excavator and workers. Below this is a list of 10 items detailing canal issues and cleanup efforts, each with a small thumbnail image and a time stamp. To the right, there are sections for "MANAGING WATER" (SCADA Project, Flood Control, Water Supply, Emergency Preparedness, Monitoring Water & Weather) and "UPCOMING EVENTS" (District Office Closed, Board of Supervisors Meeting, etc.). At the bottom, there is a "RECENT NEWS" section with links to articles about illegal dumping, storm-related debris removal, and canal rehabilitation projects.

HURRICANE IRMA
WE'VE GOT YOU COVERED

Videos and Photos

1. E-1 Canal at SW 3rd to Sandalfoot - blocked right-of-way 0:23
2. Drone flight of L-43 Canal west of Jog Rd. - blocked access and downed trees 0:43
3. L-15W Canal clearing fallen vegetation from Hurricane Irma 0:28
4. Drone flight of L-41 Canal west of E-3 Canal - blocked canal and right-of-way 0:33
5. E-1 Canal at SR-7 and Forest Hill Blvd. - example of why canal rehabilitation works! 0:34
6. L-48 Canal east of Lyons Rd. - blocked canal 0:27
7. L-46 Canal south of Glades Rd. - blocked canal and culvert 0:48
8. L-37 Canal east of Military Trail - blocked canal behind community 0:32
9. L-11 Canal west of FL Turnpike - blocked canal 0:20
10. Media - Post Storm Irma B-Roll 1:27

MANAGING WATER

SCADA Project
Flood Control
Water Supply
Emergency Preparedness
Monitoring Water & Weather

UPCOMING EVENTS

District Office Closed
December 25
District Office Closed
December 26
District Office Closed
January 1, 2018
Board of Supervisors
Monthly Meeting and
Workshop
January 10, 2018 @ 8:00 am -
9:00 am
Annual Landowners'
Meeting
January 10, 2018 @ 9:00 am -
11:00 am
District Office Closed
January 15, 2018
Board of Supervisors
Meeting - CANCELLED
January 17, 2018 @ 8:30 am -
11:30 am
View All Events

RECENT NEWS

Former Supervisor Jorge Dulbis Hides
Poison Assay
Storm-Related Debris Removal
Hurricane Highlights Importance of
Maintenance
Addendum to Solicitations for Bids &
Qualifications For Vegetation &
Erosion Control Removal Projects
LWDD Cleans Up After Irma

Updates & Community Instructions

Illegal Dumping/Debris Removal Notice - September 15, 2017
Hurricane Irma Update No. 6 - September 12, 2017
Hurricane Irma Update No. 5 - September 8, 2017
Hurricane Irma Update No. 4 - September 8, 2017
Hurricane Irma Update No. 3 - September 7, 2017
Hurricane Irma Update No. 2 - September 6, 2017
Hurricane Irma Update No. 1 - September 5, 2017

Social Media

Facebook & Twitter



Published by Reagan Carlton Walker [?] · November 17 ·

JOB OPENING

Seeking qualified candidates for a Permit Coordinator position is responsible for reviewing applications, issuing permits, coordinating work, including review and approval of construction plans, record drawings and project certifications, for facilities of the District proposed within or connected to the District's rights of way. Competitive wages and benefits offered. For a complete job description visit our website: <http://www.lwdd.net/contact-us>



438 people reached



Published by R

Residential Communit
repairs or replaceme
discharge control stru
years. #LwddAtWork



Published by Rosemary Berger-Rayman [?] · October 2 ·

LWDD Crews cleared the L-23 Canal at SR-7. Providing clear access, reduced risk of flooding and potential property damage. Great Job!



Nov 2017 • 30 days

TWEET HIGHLIGHTS

Top Tweet earned 267 impressions

LWDD water managers are working everyday to ensure flood control systems are working to protect you and your property. #lwddatwork
pic.twitter.com/t79bAx8fVv

Top media Tweet earned 262 impressions

3 main reasons for flooding in LWDD area:
rainfall exceeds system design, poor
maintenance & construction prior to 1970's
regulations pic.twitter.com/MCP400cMRC



471



Published by Rosemary Berger-Rayman [?] · October 5 ·

Local Flood Control in Spanish and English!



Lake Worth Drainage District

LWDD.NET

[Learn More](#)

 2052 people reached

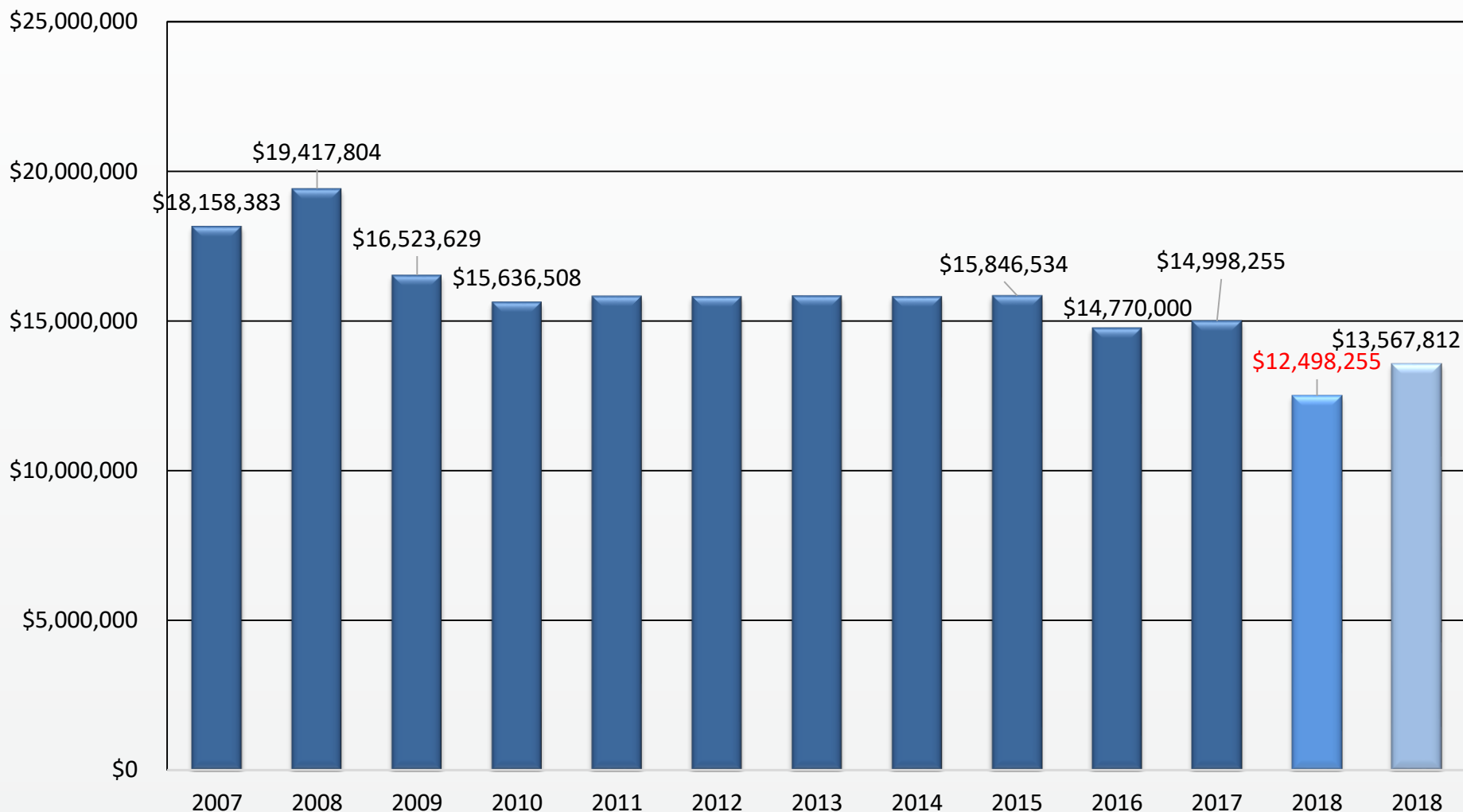
Boost Post

Looking Ahead



- Completion and implementation of Telemetry/SCADA system construction
- Continued execution of Canal Rehabilitation Program
- Ongoing capital projects for refurbishment of water control infrastructure
 - Control Structure 9 relocation;
 - Control Structure 20 preliminary engineering
- Renewal of LWDD's water use permit
- Transfer of Development Rights (TDRs)
- Consideration of special assessments for site-specific maintenance projects (e.g. Leisureville)

Extraordinary Income Balance



Looking Ahead Managing Costs



- Ongoing evaluation/consolidation of job functions through attrition as operational efficiencies are realized
 - 14 employees currently enrolled in DROP and will be retiring within next 5 years
- Continued use of contracted maintenance work and consideration of cost savings – mowing, tree removal and demolition
- Managing benefit costs; leveraging wellness programs
 - Tobacco-Free Campus effective March 1, 2018
 - Free tobacco cessation program and quit aids offered to employees

- The 2017 Report to Landowners provides an overview of the District's annual activities, including District activities undertaken in furtherance of the adopted water control plan
- Recommend acceptance of report pursuant to Florida Statutes Ch. 298.26

The End!

