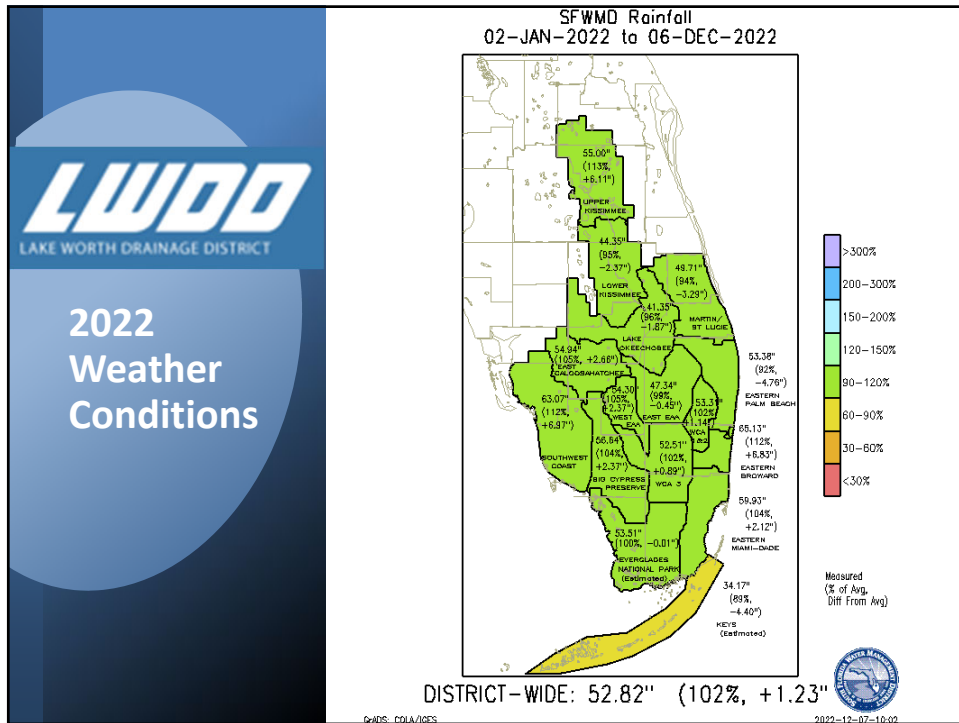




1



2

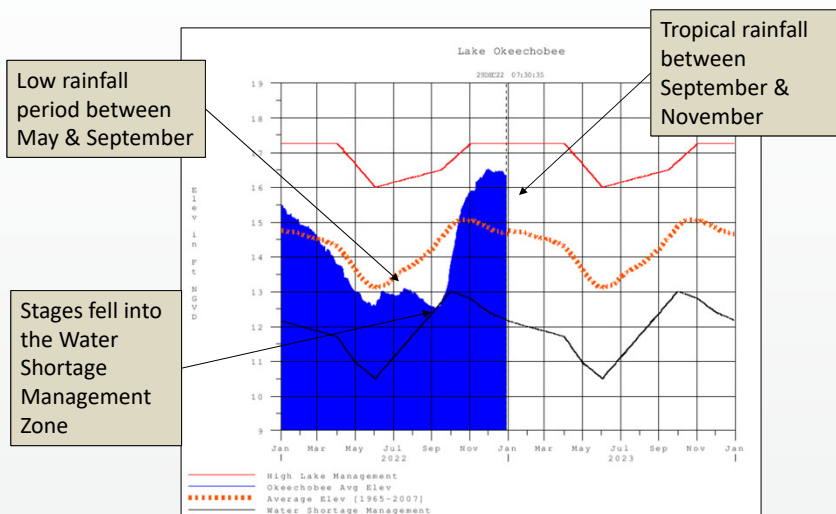
2022 Weather



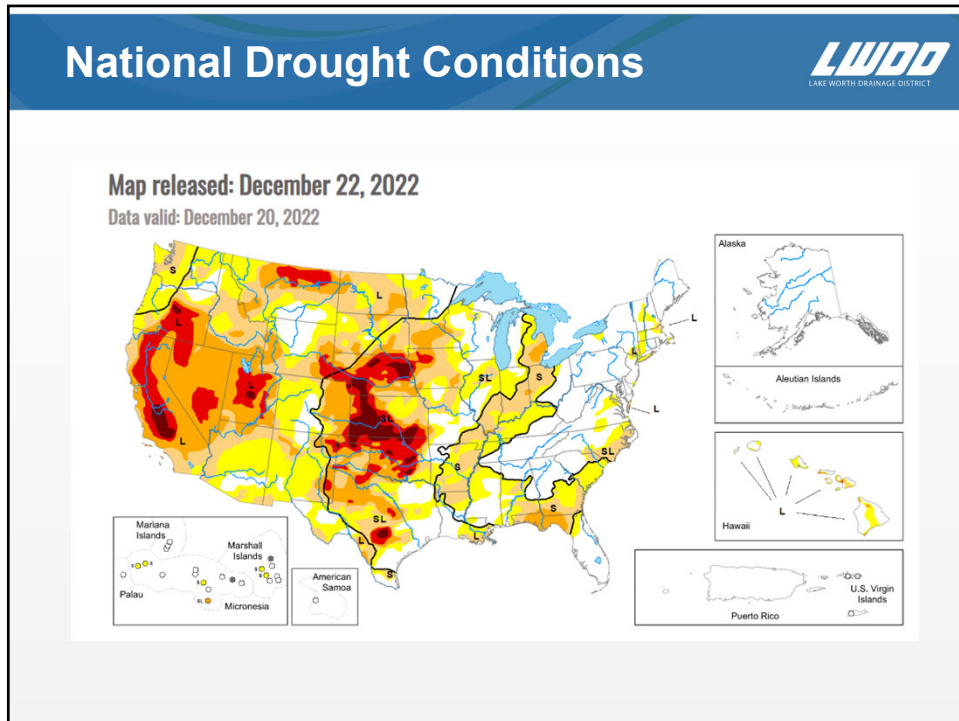
- After a normal dry season, the first part of the wet season experienced significantly below-average rainfall
- Lake Okeechobee stages fell into the Water Shortage Management Zone during the wet season
- However, hurricanes and tropical systems that impacted south Florida late in the wet season returned Lake Okeechobee to normal, beneficial levels

3

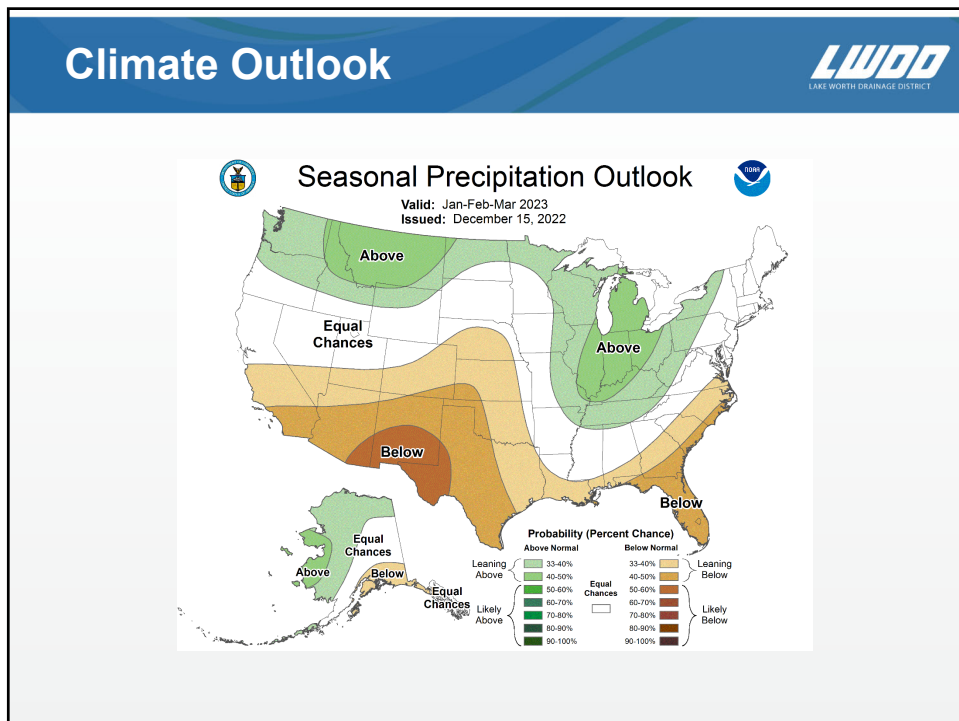
Lake Okeechobee Stages



4



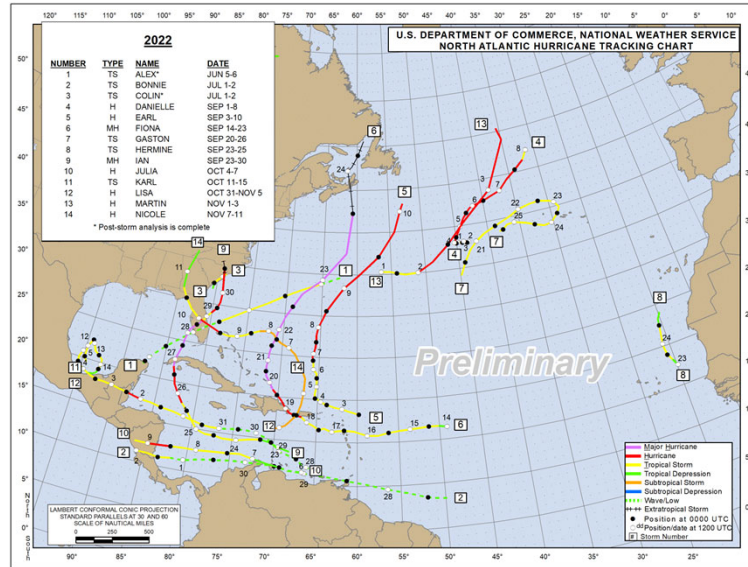
5



6

2022 Hurricanes & Tropical Systems

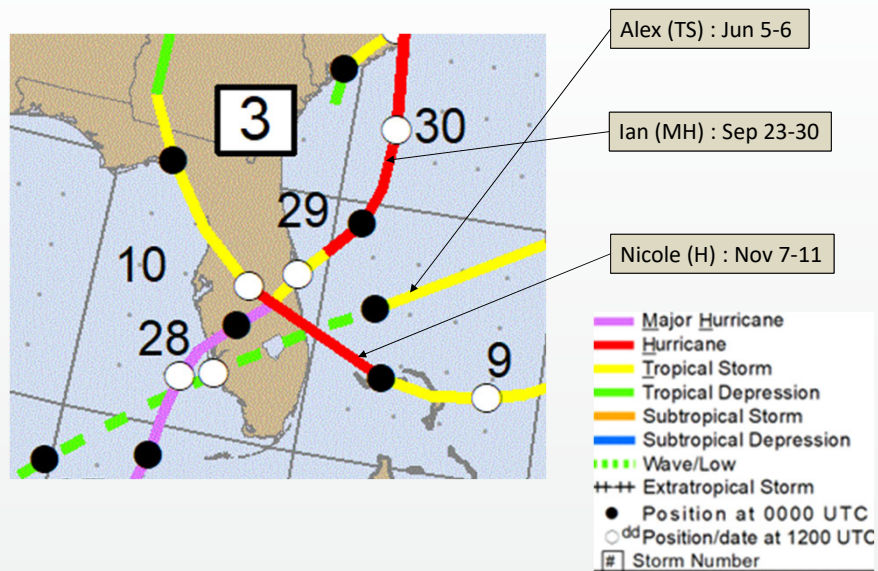
LWDD
LAKE WORTH DRAINAGE DISTRICT



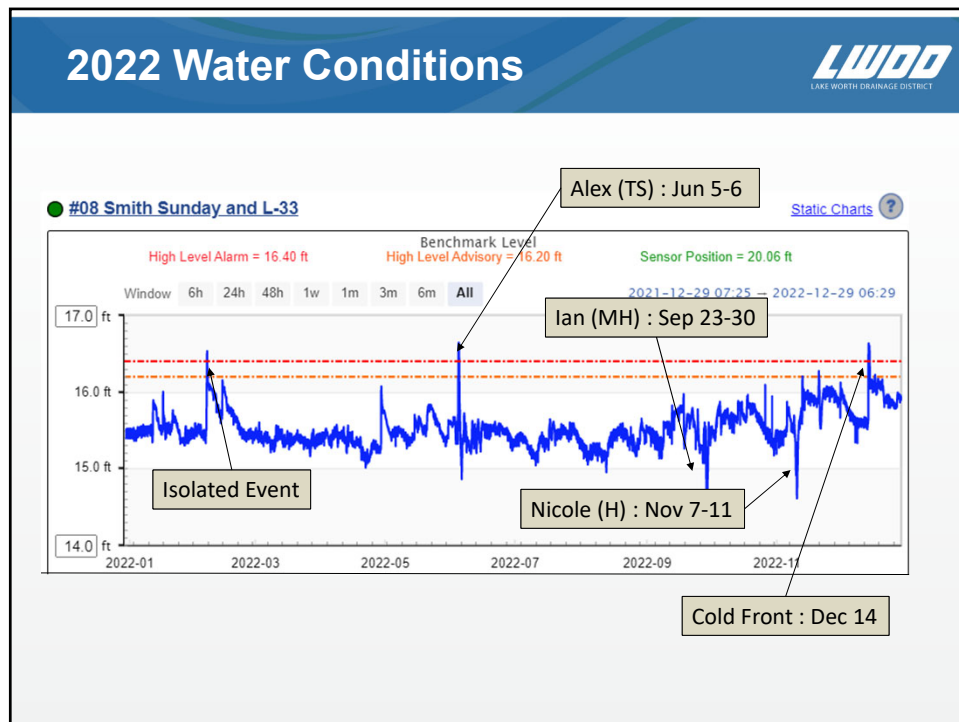
7

2022 Hurricanes & Tropical Systems

LWDD
LAKE WORTH DRAINAGE DISTRICT




8



9

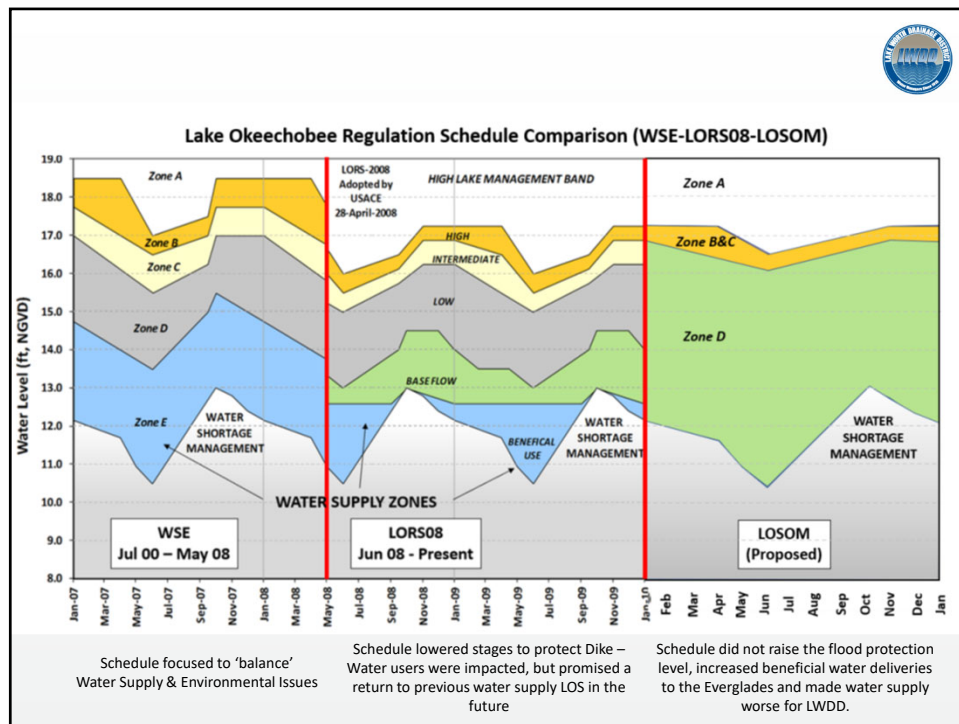
Lake Okeechobee / Water Supply



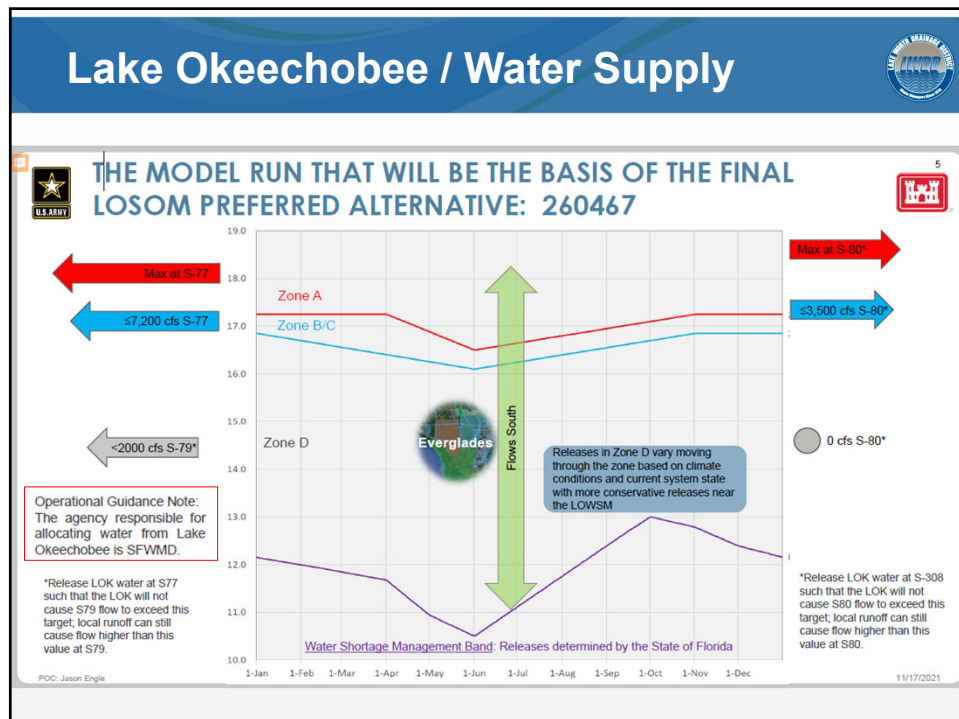
LAKE WORTH DRAINAGE DISTRICT

- USACE Completed the Draft Environmental Impact Statement (EIS) for Lake Okeechobee System Operations Manual (LOSOM)
- The EIS documented a number of issues which could impact LWDD water supply and environmental conditions in WCA-1
 - LWDD provided detailed comments on the document
 - 16-page report (w/ economic impact analysis) to USACE Col. Booth
 - Public comment to SFWMD Governing Board
 - Coordination with Palm Beach & Broward counties
 - Public comment at the annual 'Water Forum'; sponsored by Associated Industries of Florida
- The EIS is expected to be finalized in the Spring or Summer of 2023

10



11

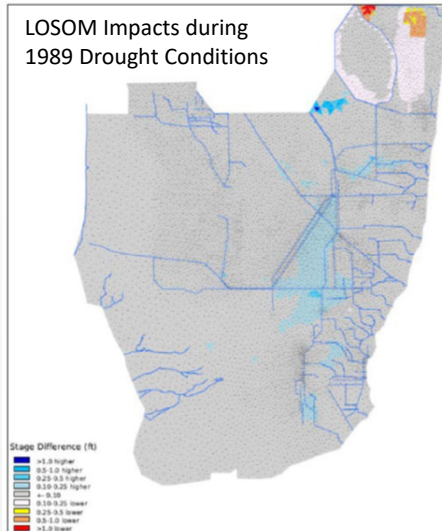


12

LOSOM / Water Supply



LOSOM Impacts during
1989 Drought Conditions



- Drought impacts to LWDD & WCA-1
- 'Sending Water South' benefits Broward & Miami-Dade counties, but impacts Palm Beach County
- Water Control Manual provides extraordinary flexibility to reduce water supply reserves
- Operational flexibility significantly increases risks of water shortages
- Sources of water are not protected as envisioned in CERP

13

Lake Okeechobee / Water Supply



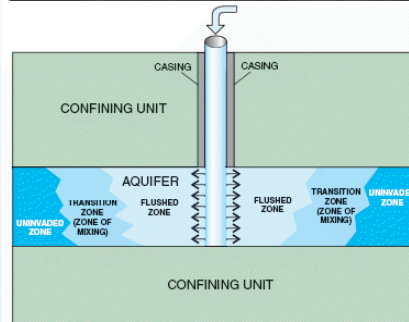
- Water supply reliability was not returned to pre-LORS08 levels
 - And was NOT improved over the current operating plan (LORS08)
- Lack of excess flow from Lake Okeechobee will increase LWDD's reliance on Water Conservation Area 1 to meet supplemental water demands
- Changes in regional water sources and the potential deauthorization of CERP storage projects increase uncertainty of water availability to meet current demands in future years
- **Serious implications for LWDD future water supply**

14

Water Supply Alternatives



- Aquifer Storage & Recovery systems may offer an alternative to the overall reductions in the availability of regional water supplies
- LWDD Feasibility Study underway to determine the applicability of ASR in improving regional water availability to meet current needs; expected completion in Spring 2023
- Permit for SFWMD ASR well on the Hillsboro Canal transferred to LWDD; possibility of re-activating the existing abandoned well in future



15

Control Structure 9 Refurbishment



- Board approved refurbishment of existing structure in 2020
- Completed in 2022:
 - Purchased key components including submersible pumps & motor starters
 - Awarded contract for refurbishment work
 - Completed installation of the curb cuts, monitoring piers, and rough electric
 - Began installation of the new equipment
- To be completed in 2023:
 - Demolition of the existing pump houses
 - Installation of pumps and control systems
 - Installation of new radial gates
 - Installation of variable frequency drives for pumps and needle racks which will significantly improve operation and performance

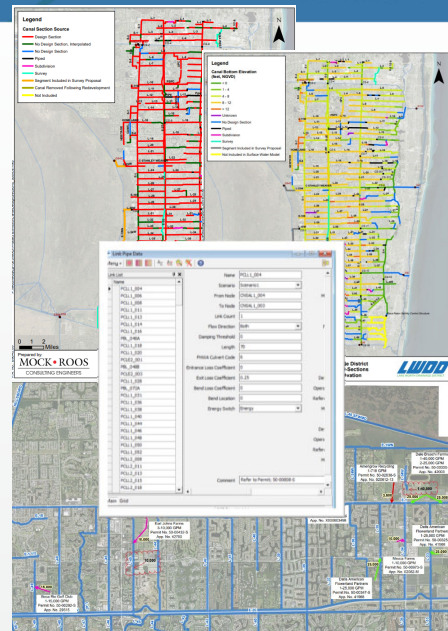


16

Comprehensive Modeling Effort

LWDD
LAKE WORTH DRAINAGE DISTRICT

- Phase 1 completed
 - Sub-basin delineation and conveyance features
- Phase 2 underway - HYDRAULICS
 - Collecting culvert information
 - Collecting bathymetry data
 - Developing centerline alignment, canal sections and canal specific hydraulic parameters
- In 2023, continue to build hydraulic model and begin testing & calibration
- Final model & report (superseding prior "Interbasin Study 1996 rev") on schedule to be complete by the end of 2024



17

Modeling Efforts




18





19

Canal Rehabilitation Program



- Coordination of canal rehabilitation projects is a District-wide effort requiring participation by all staff
 - Researched and mapped right-of-way ownership for ~41 miles of canal
 - Captured GoPro 360-degree video segments of all project areas for advance inspection of canals
 - Field staked ~11 miles of right-of-way
 - Prepared and distributed almost 800 notification letters via hand and mail delivery
 - Fielded ~155 project-specific public inquiries
 - Hosted 5 project-specific public outreach meetings with residents and neighborhood associations
 - Continually updated information and project status on District website, social media and newsletters

20



21



22



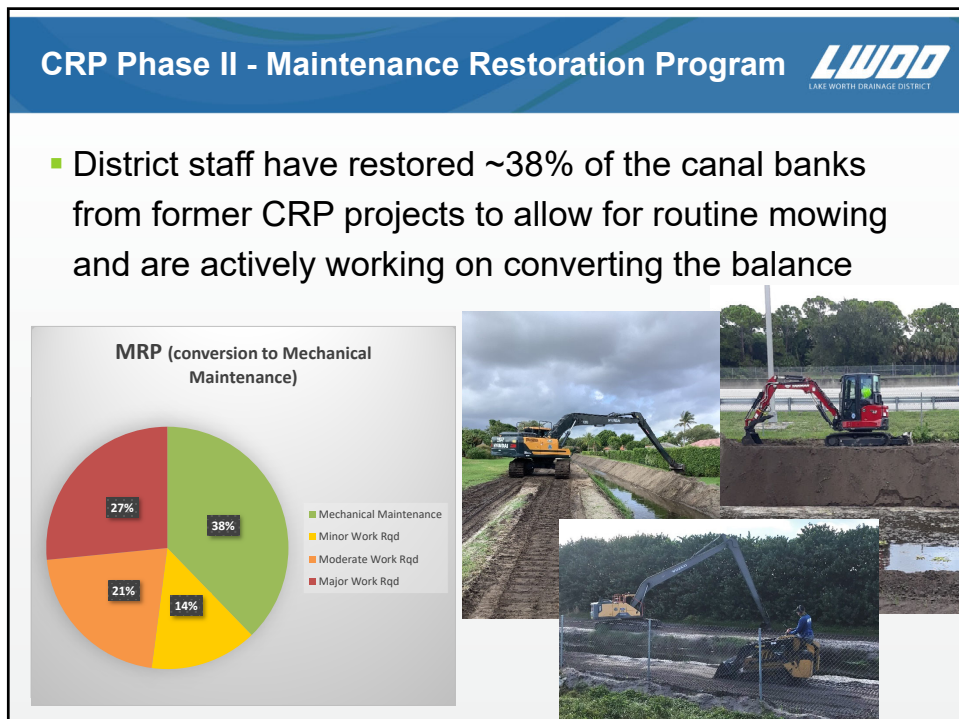
23



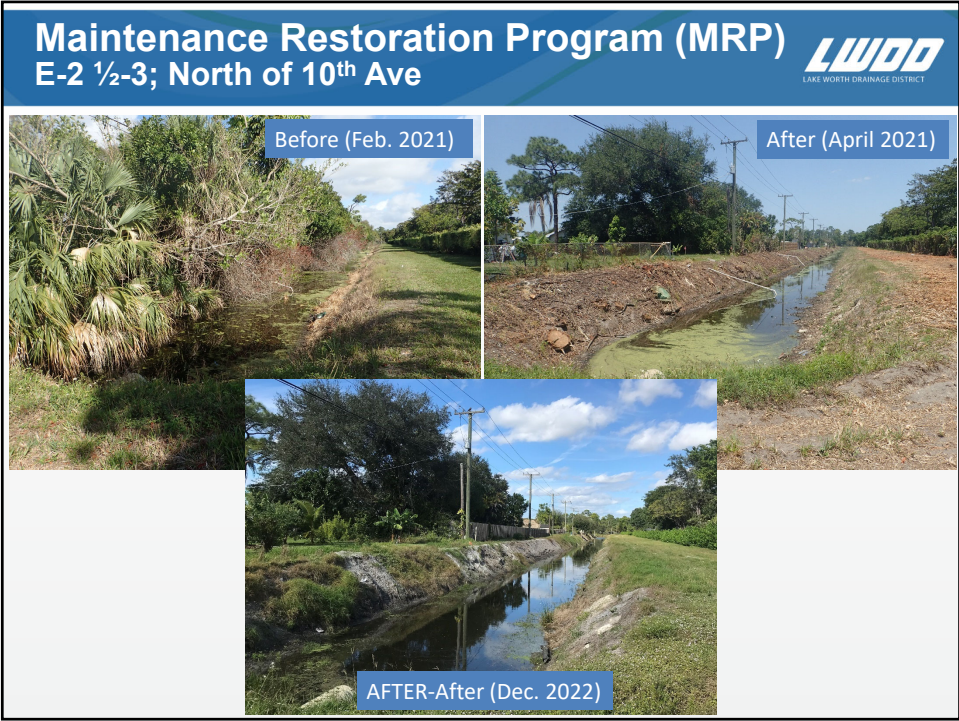
24



25



26



27



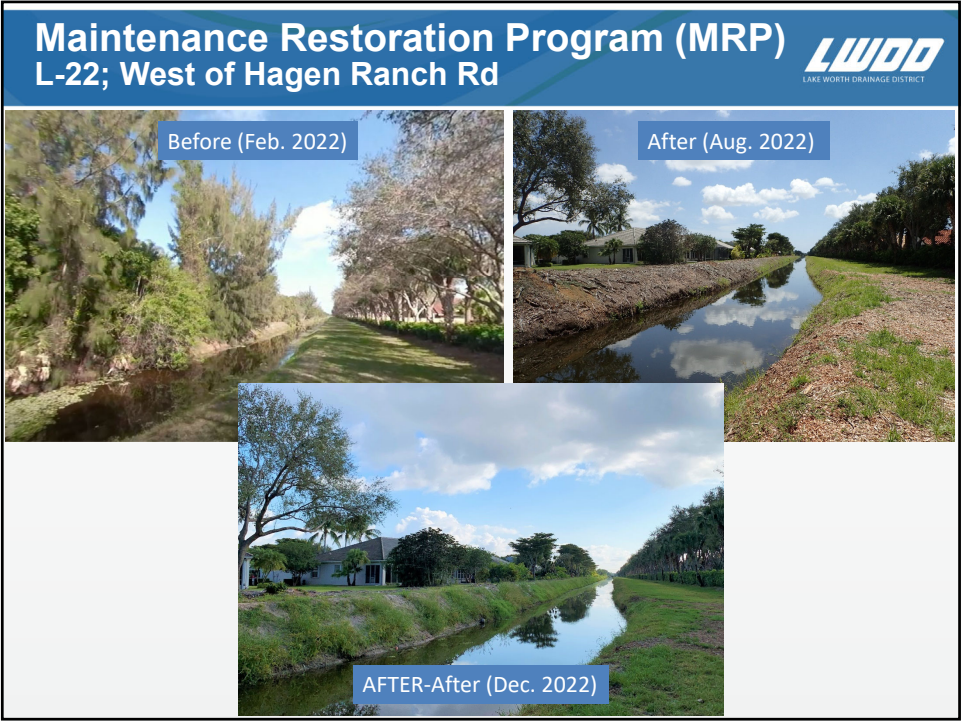
28



29



30



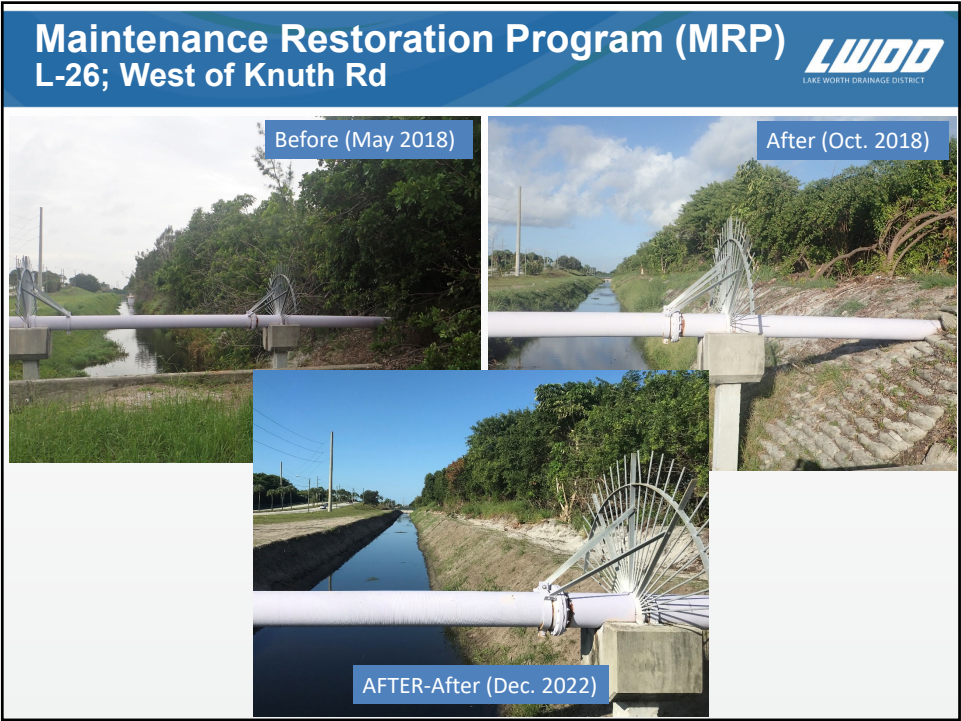
31



32



33



34

Canal Maintenance Low Maintenance Bank Mowing



- Established a three-man “Low Maintenance” mowing crew and routine maintenance schedule
- 19.55 miles completed in 2022



35

Canal Maintenance High Maintenance Bank Mowing



- ~1,800 miles of Flat Mowing of canal rights-of-way
 - ~450 miles, 4 times per year
- ~1,530 miles of Slope Mowing of canal rights-of-way
 - ~510 miles, 3 times per year
- Annual Contract for Mowing Services; \$275,000
 - Flat mowing ~175 miles, 4 times/year
 - Slope mowing ~180 miles, 4 times/year



36

Canal Maintenance Vegetation Management



- Treated ~6,425 acres of aquatic vegetation
 - ~925 acres Floating Vegetation
 - ~1,900 acres Submerged Vegetation
 - ~950 acres Littoral Vegetation
 - ~2,650 acres Littoral/Floating combined
- Annual Contracted Services: \$93,000
 - North of C-51 Canal
 - Boca Basin

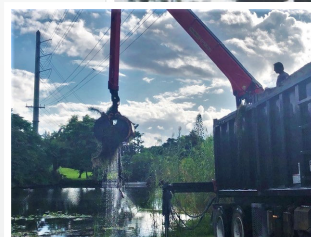
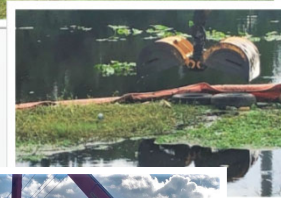


37

Canal Maintenance Vegetation Management



- Currently maintaining 181 boom sites throughout District canals
- Replaced 36 booms due to wear and/or boat traffic
- Continued mechanical removal of aquatic vegetation to supplement chemical treatment



38

Other Canal Maintenance



- Routine dredging ~22 mi
- Bank repair ~17 mi
- Fill hauling ~7300 CY
- Vertical side-trimming ~27 mi
- Expanded access gate installations at arterial or and collector roads; 24 new gates installed



39

Horticultural Waste Disposal Site – Mulching Only



BEFORE



AFTER



40

Structure Maintenance



- Regularly service and maintain 10 major water control structures
- Continual monitoring of system components to ensure efficient operation of structures and flood control gates
 - Completed 120 routine Preventative Maintenance tasks
 - Perform unscheduled maintenance as needed



41

Campus Improvements

- New fuel pumps
- Updated signage

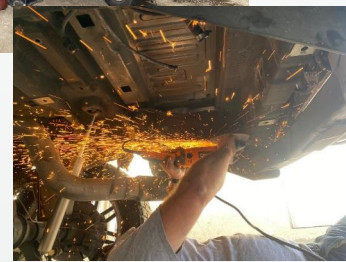


42

Fleet Maintenance



- District staff maintains a fleet of:
 - 64 light vehicles
 - 34 machines / heavy equipment
 - 9 tractor mowers
 - 7 boats
- Routine services completed
 - 87 light vehicles
 - 102 machines / heavy equipment
 - 44 tractor mowers

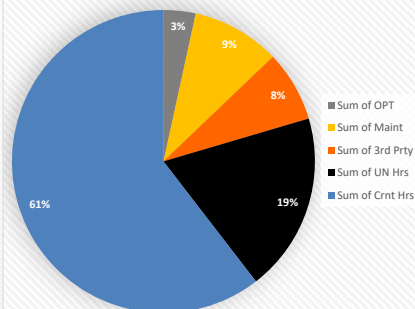


43

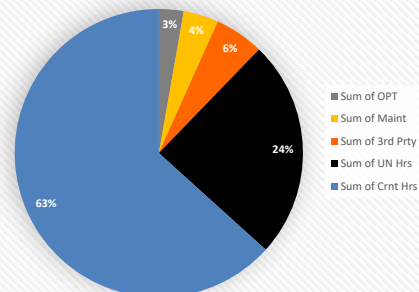
Equipment Utilization Heavy Equipment



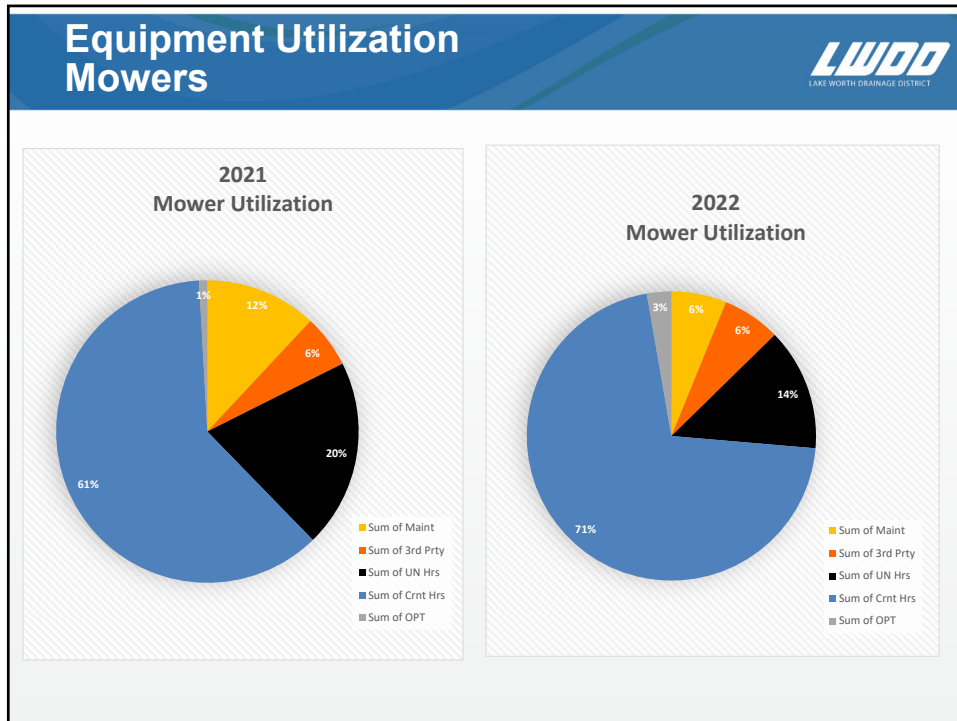
2021
Heavy Equipment



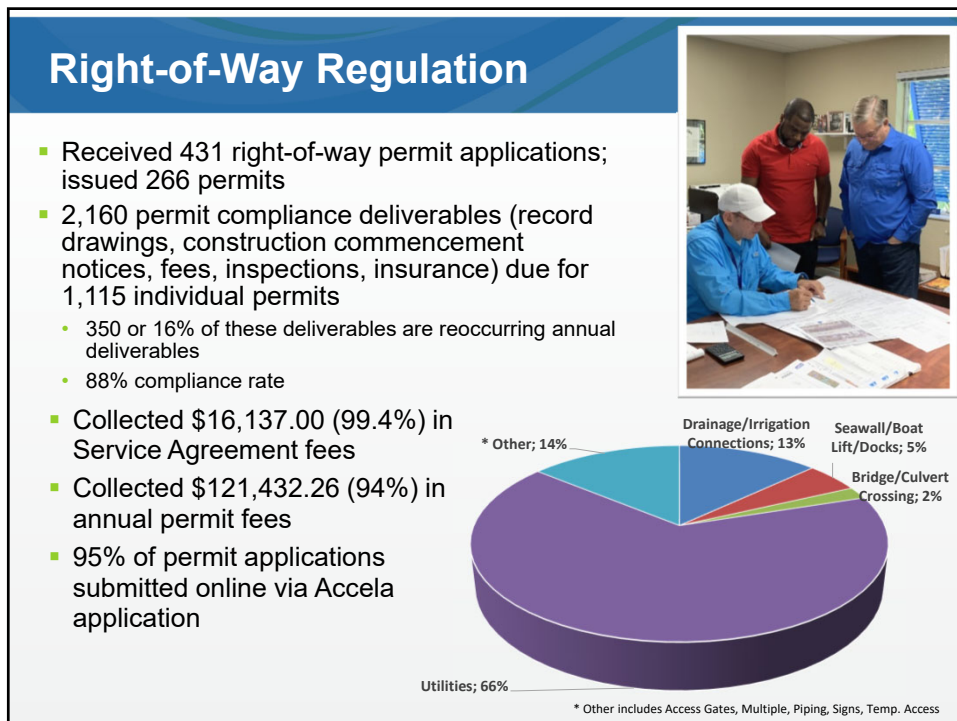
2022
Heavy Equipment



44



45

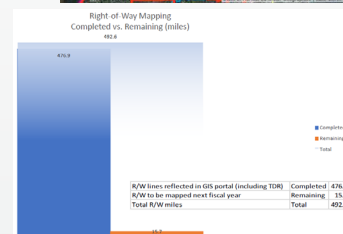
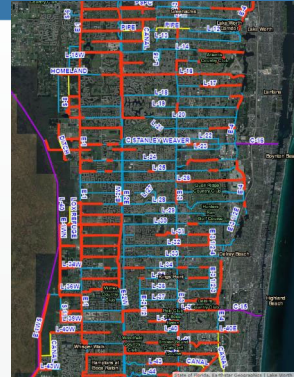


46

Right-of-Way Regulation

LWDD
LAKE WORTH DRAINAGE DISTRICT

- Mapped additional 72 miles of LWDD canal right-of-way ownership
 - 477 miles or 97% mapped to date; 16 miles remaining and to be completed in FY23
- Researched and responded to 5,231 Chancery Case 407 review requests
- Completed 612 plat and development reviews for county and municipality projects
- Compliance Cases:
 - Opened 553 cases
 - Majority of new cases are legacy encroachments following CRP vegetation removal projects
 - Resolved/closed 219 cases



47

Right-of-Way Regulation

LWDD
LAKE WORTH DRAINAGE DISTRICT

Encroachment Removal; L-32 – North Bank, East of Military Trail

Fence/Vegetation Encroaching Approx. 8' - Facing North



Before

Fence Removed



After



48


Right-of-Way Regulation

LWDD
LAKE WORTH DRAINAGE DISTRICT


Encroachment Removal; L-32 – North Bank, East of Military Trail

Fence/Fence Extension Encroaching Approx. 8’/14’ – Facing North

Fence Removed







Before

After

49

Right-of-Way Regulation


LWDD
LAKE WORTH DRAINAGE DISTRICT

Encroachment Removal; E- 4 – East Bank, South of Linton Blvd

Mailboxes Encroaching Approx. 12’- Facing South

Mailboxes Removed-R/W Restored – Facing North





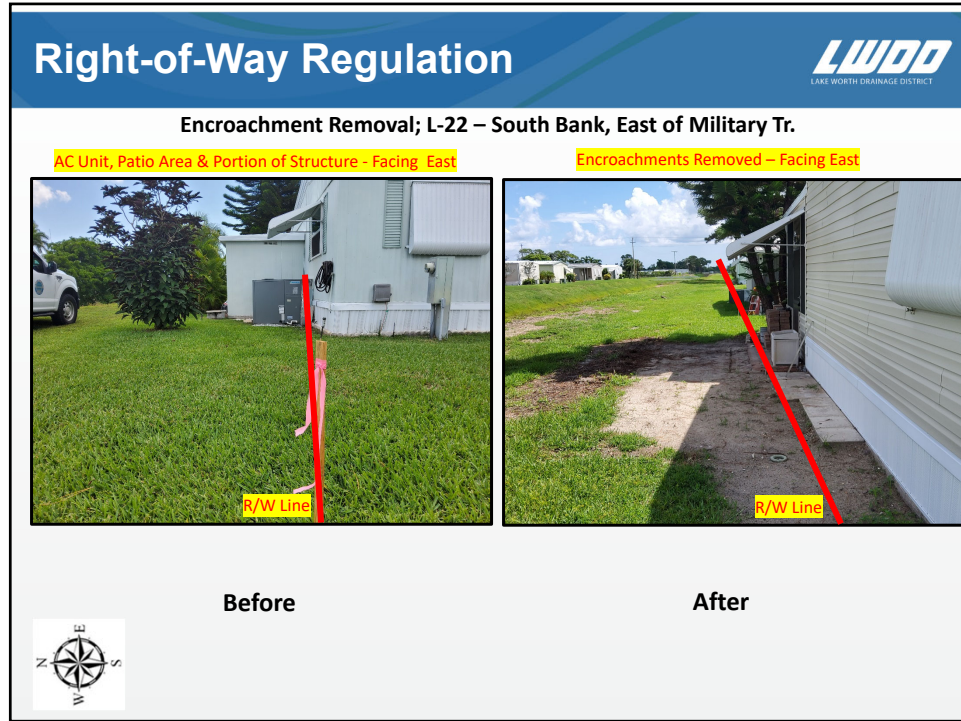


Before

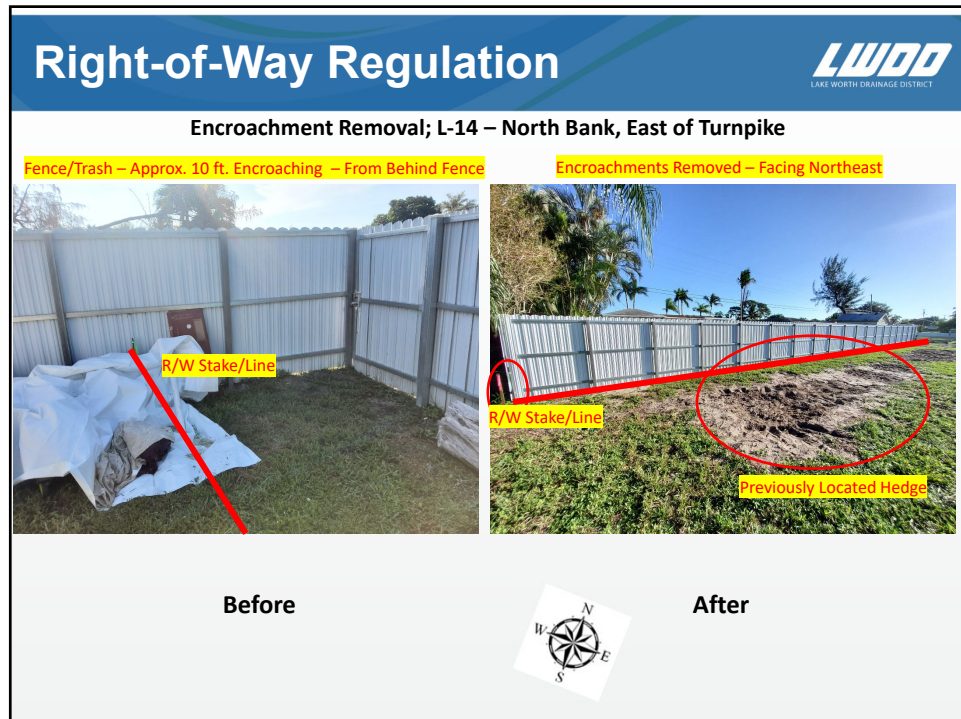
After



50



51



52

Right-of-Way Regulation



Encroachment Removal; L-19 – North Bank, East of Jog

Portion of Structure – Facing North



Portion of Structure Removed – Facing North






Before

After

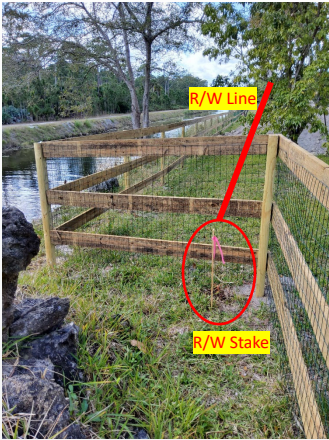
53

Right-of-Way Regulation





Encroachment Removal; L-5 – North Bank, West of E-2

Fence – Facing West




Fence Removed – Facing East





Before



After

54

Right-of-Way Regulation



Encroachment Removal; L-12 – South Bank, East of Empire Way

Handhold/Conduit & Concrete Pad – Facing East



Before

Encroachments Removed – Facing East



After

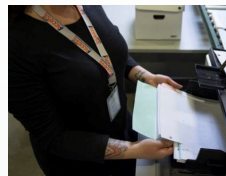


55

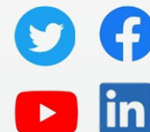
Public Records & Information



- 581+ satisfied inquiries from the public
- Held the 7th Annual Flood Control Workshop for HOAs & Property Managers
- Expanded growth on social media with addition to Nextdoor
- Published monthly newsletter with a subscription of 4000+
- Provided communication with Residential Communities during Tropical Storm Agatha and Hurricanes Ian and Nicole
- Processed the scanning of 68,000+ sheets of paper; disposed of 17 cubic feet of paper records in accordance with approved retention schedules



Nextdoor



56

Staffing

- Total number of staff has not increased in more than 13 years; 87 budgeted positions (4 current vacancies)
 - Average 11 years of service for current employees
 - 17 employees hired in 2022; 2 are returning employees
 - 2 employees retired in 2022 (27 in past 5 years; 1/3 of workforce)
 - 6 current employees enrolled in DROP and will be retiring within next 5 years
- Maintaining operational costs through organizational planning
 - All vacancies reviewed for business need
 - Resources redirected as business needs change to ensure appropriate staffing for priority programs

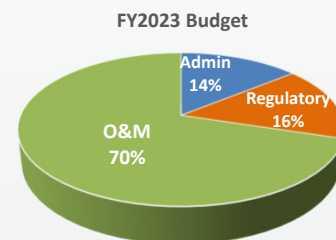


57

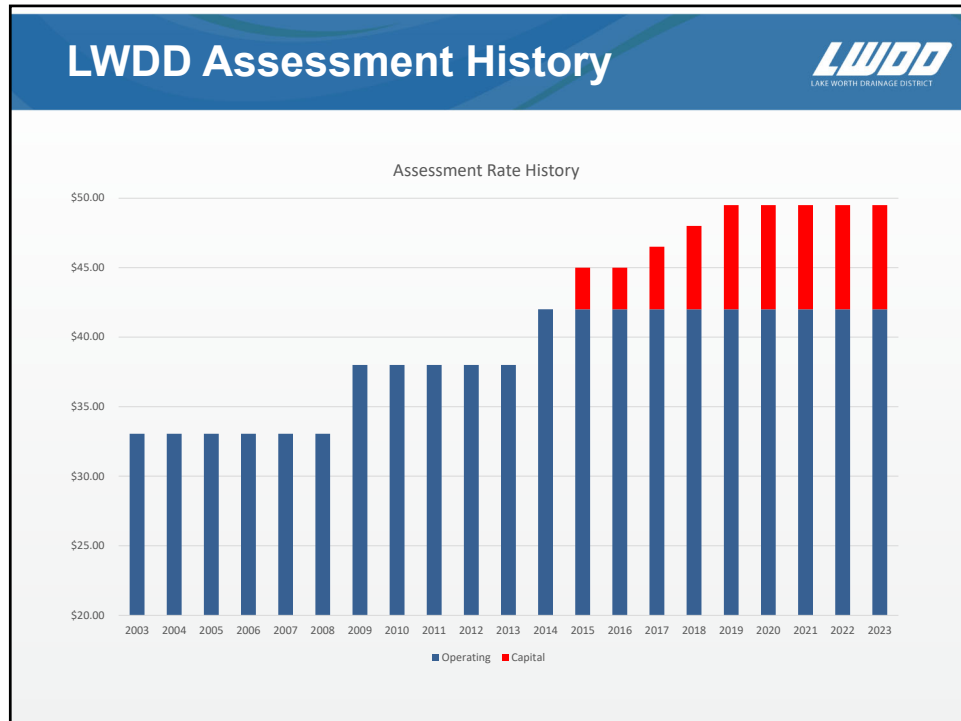
Financial Highlights



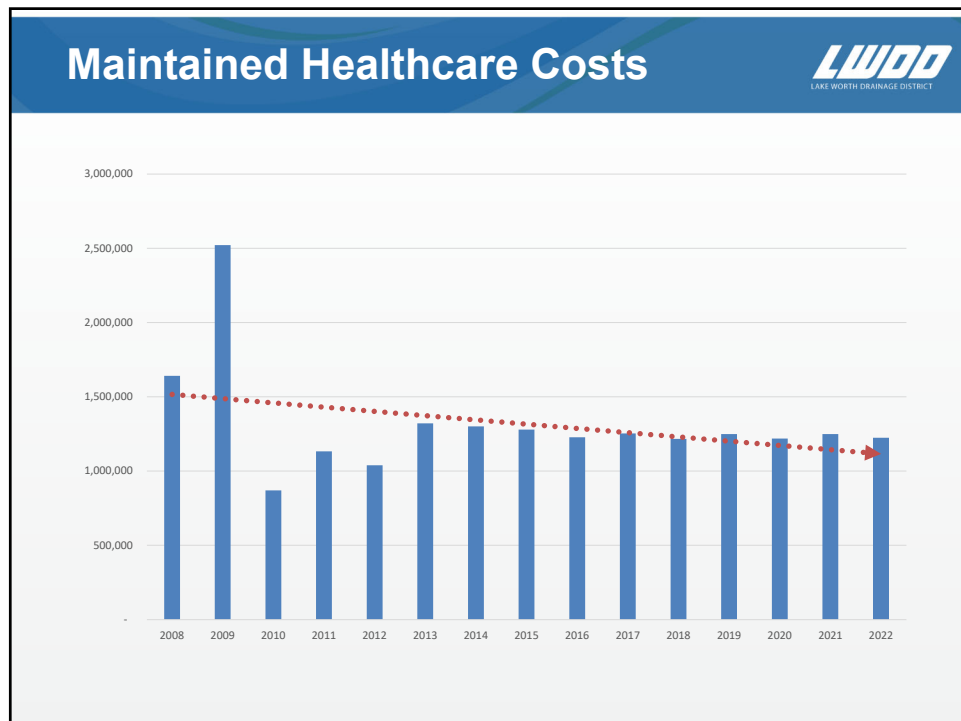
- Auditors issued unqualified opinion for FY2021; financial records and statements are fairly and appropriately stated in accordance with generally accepted accounting principals
- Adopted FY23 budget of \$18.5 million
 - \$49.50 non-ad valorem annual assessment rate
 - \$4 designated for accelerated canal rehabilitation and \$3.50 for improvements to District's infrastructure
 - \$42.00 operating budget has not increased in 8 years
- Revenues received:
 - Permit fees - \$886,000
 - Interest earnings - \$99,000
 - Quit claim deeds - \$2,000
 - Tower Lease - \$123,000
 - Sale of surplus equipment - \$166,000
 - Sale of surplus real estate/transfer development rights - \$18,439,000



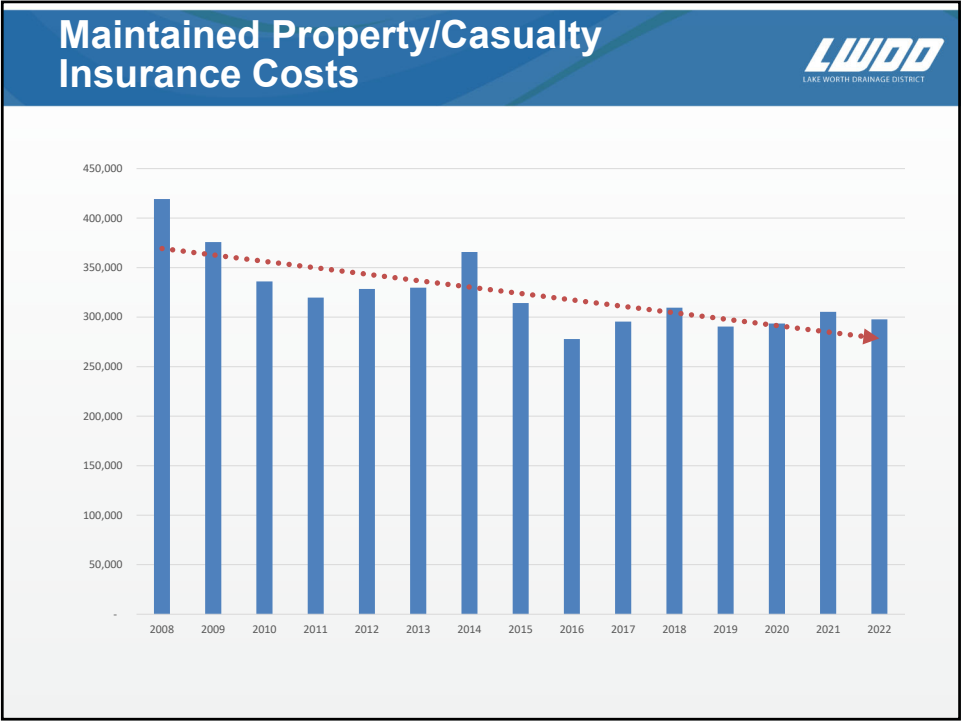
58



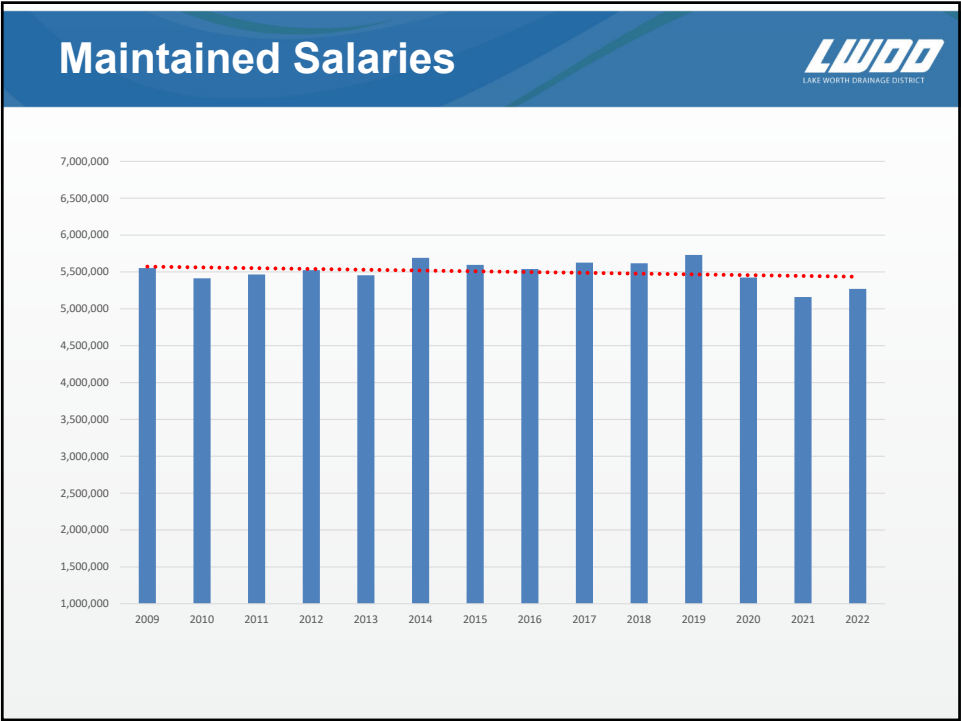
59



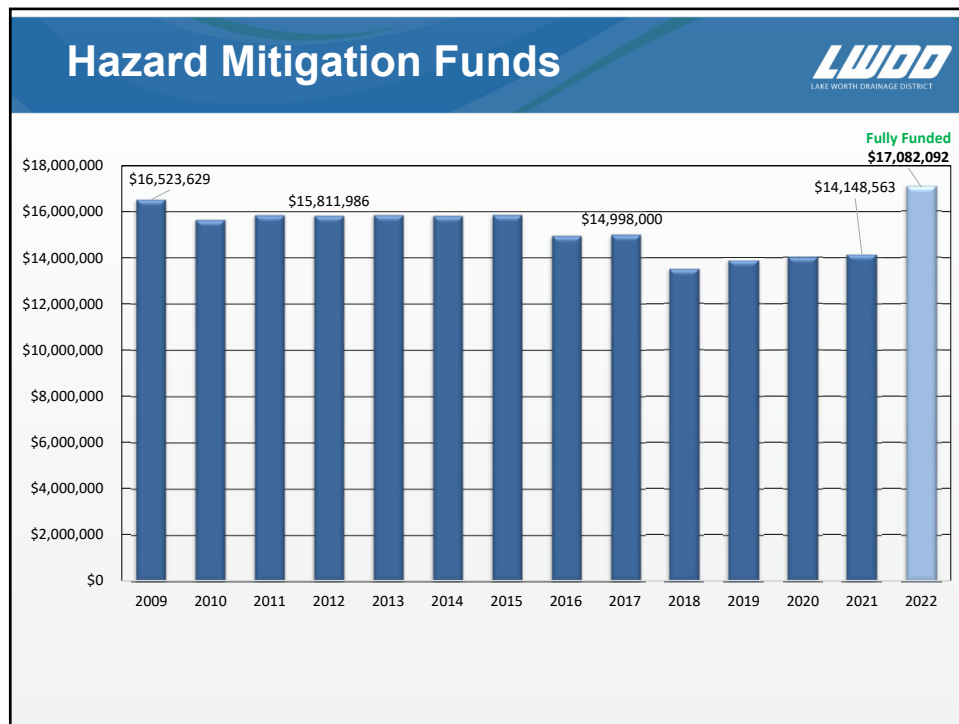
60



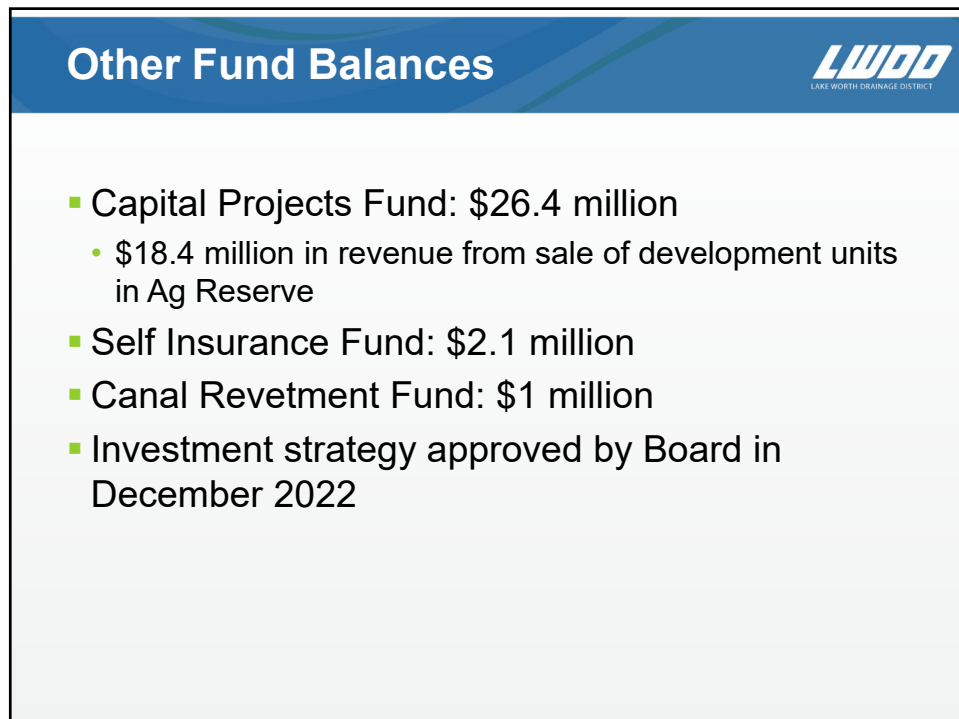
61



62



63



64

Looking Ahead



- Completion of Canal Rehabilitation Program – Phase I Vegetation Removal
- Canal Rehabilitation Program – Phase II
 - Restoration of low maintenance canal banks
 - Management of existing structural encroachments on rights-of-way remaining after canal rehabilitation (3,000+ structural encroachments initially identified)
- Ongoing capital projects for refurbishment of water control infrastructure
 - Secondary Control Structure remediation and enhancements
 - Hydrologic model; last comprehensive model completed in 1992, nearly 30 years ago
- Aquifer Storage & Recovery (ASR) Feasibility Report; regional water supply issues
- LOSOM coordination
- Turnpike widening project coordination

65

Recommendation



- The 2022 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

66

Governing Board



Jim Alderman elected for new three-year term



Harry Raucher retired in October 2022 – 11 years



Carrie Hill appointed interim Supervisor

67

Governing Board Service



- 5 Years
 - Jeff Phipps – August 2014 – 2019
 - Steve Bedner – October 2015 – 2020
- 20 Years
 - Jim Alderman – February 2003-2023
- 30 Years
 - John Whitworth – October 1990 – 2020

68