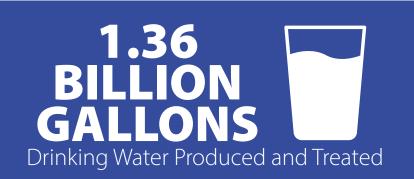
City of Delray Beach Utilities Department Quarterly Progress Report

October - December 2023





220 MILLION GALLONS Reclaimed Water for Irrigation

8,000 Water Quality Tests

Maintenance

Asset Management **3,195** Preventive Projects

401 Corrective Projects

Laboratory

Water Analysis **8,021**In-House Tests Completed

8,055 Total Tests Completed

Engineering Division

Technical Advisory Committee

28 Project Reviews

Water Treatment Plant

Average Daily Demand

14.768 Million Gallons/Day

Water Treatment Plant

190 Maintenance Projects

13 Corrective Projects

Wells/Repump 155 Maintenance Projects

7 Corrective Projects

Water/Sewer Network

21 eaks/Low Pressure Reported

Water Main Repairs

73 Stoppages Cleared

142 Work Orders Resolved

Customer Service

58 Utility Billing Work Orders Environmental Resources Compliance

318 Permit Reviews

4,833 Service Line Surveys

287 New Backflows

Spills

2 Scheduled Boil Water Notices

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Water Treatment Plant

Activities

• Ongoing repairs to the vacuum filter equipment

- Installed new equipment and instrumentation and control wiring
- Continued rehabilitation of Clarifier 3
- Started Sodium Hypochlorite chemical skid piping improvements
- Installed new lines for instrumentation and control and provided feedback to SCADA



Clarifier 3 Repairs



Vacuum Filters Repairs



Vacuum Filters Repairs



New module for process monitoring

Water / Sewer Network

Activities

- Cleared 73 stoppages and resolved 142 customer work orders
- Processed 1,770 calls and resolved 58 payment work orders
- Replaced six fire hydrants, repaired two fire hydrants, exercised 179 system valves, and installed 24 meters



Valve Replacement N. Ocean Blvd.



S. Swinton Ave. Service Line Replacement



Fire Hydrant Replacement W. Atlantic Blvd.



Sherwood Blvd. Hydrant Replacement

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Maintenance



Activities

- Installed flushing ports on wells 17, 21, and 32 and a new impeller on Pump 3 at the South Pump Station
- Repaired recovery basin pumps
- Continued rehabilitating wells 27
- 23 completed repairs to force main
- Replaced Pump 2 at the Seasage Storm Pump Station and the pumps at Lift Stations 13, 23, and 51
- Put new Lift Station 86F into service
- Rebuilt the control panel at Lift Station 61A
- Cleaned, painted, and repaired the Water Treatment Plant's lime room, thickeners, pipe gallery floor, and filter actuators



Seasage Storm Station Repair







Raw Water Well 17 Flushing Port

Laboratory

Water Treatment Plant Finished Water Quality

Tests	Target	Ave			
рН	8.2-9.0 units	8.65	 Image: A set of the set of the		
Alk	>40 mg/L	60	 Image: A start of the start of		
Ca Hard	>31 mg/L	85	~		
Turb	0-1.0 NTU	.2	 Image: A start of the start of		
Color	0-15 units	14	 Image: A start of the start of		
Cond		382			
Fe	0-0.1 mg/L	<0.05	 Image: A start of the start of		
NH ₃ -N free	<0.15 mg/L		 Image: A second s		
F	0.7 mg/L	0.56	~		
Cl ₂	0.6-4.5 mg/L	4.6	 Image: A start of the start of		
O-PO ₄	>0.20	0.26	 Image: A start of the start of		

✓ Results within acceptable range

Distribution System Water Quality

Activities

- Continued hiring search for Quality Assurance Analyst
- Continued staff training for the new Ion Chromatography (IC)
- Updated GW monitoring and field reporting
- Found the root cause and provided corrective action on the failing Non-Conformance Report (NCR)
- Consolidated common test methods between the lab and the Water Treatment Plant
- Finalized LIMS system contract and sent to the Legal Department and Ethosoft for review
- Created Data Review Checklist and 2nd level review
- Created Method Validation of new IC and completed Method Detection Limit (MDL) studies

Tests	Target	Ave	Min	Мах	Count				
Residual Chlorine	0.6-4 mg/L	3.53	0.63	5.1	NA	~			
T. Coliform	<= 4 counts	2	0	2	4	 Image: A start of the start of			
0-P0 ₄	>0.20 min	0.3	0.14	0.39	NA	 Image: A start of the start of			

Environmental Resources Compliance



Verifying dual check certification



Locating a water meter to confirm backflow inventory data

Activities

Cross-Connection Control:

- Inspected 70 reclaimed cross connections
- Conducted five master irrigation community water audits
- Confirmed no accounts were sent to Code Enforcement for failure to install a backflow preventer

Utilities:

- Completed 318 development plan permit reviews
- Completed an E-Aquifer Parameter Test for fuel tank wells
- Revealed all sites were compliant via the Wellfield Audit
- Performed an audit on the Industrial Pretreatment Program and confirmed compliance
- Performed two Environmental Resources Management (ERM) Tank Inspections and confirmed both sites were in compliance
- Received final letter from ERM Tanks Department regarding Public Works overseeing quarterly sampling for Monitoring Wells 6, 9, and 10
- Attended final Magistrate Hearing for Sabal Pines Condo Association and All County Paving

Engineering Division

Activities

- Completed scoping and negotiations for the new Water Treatment Plant.
- Completed the start-up of a new lift station at Enclave Sherwood and of existing Lift Station 086
- Attended a public outreach meeting at Tropic Isles to discuss the project scope for water and sanitary sewer with residents
- Reviewed and signed-off on Health Department permits for water and sanitary sewer mains
- Reviewed 60 percent design submittal for Chemical Tank and Clearwell Upgrades design and attended the 60 percent design review meeting with the engineer
- Assisted with pursuing a warranty claim to replace Sodium Hypochlorite tank
- Reviewed proposed new easements for water and sewer and proposed easement abandonments
- Managed coordination with the City's attorney and a city engineer on two Hold Harmless Agreements
- Attended weekly meetings and provided project updates
- Continued reviewing the City's Minimum Construction Standards

City Lift Station 086

- Installed new pumps with higher horsepower, RTU, electrical control panel, and segment of force main
- Replaced an FPL transformer
- Performed modifications to a wet well hatch



Contractor installing new forcemain at Lift Station 086