Town of Palm Beach Water Supply Feasibility Study

Meeting November 2022

Overview

- City of West Palm Beach As Is
- City of West Palm Beach Membrane Upgrade
- City of Lake Worth Beach
- Intracoastal Waterway Transmission Line
- Next Steps

City of West Palm Beach – As Is

Source Water	Raw Water Supply	Treatment Process	Treatment Capacity
Surface Water	41.2 MGD	Conventional (PAC, Lime Softening, carbon and sand filtration, UV disinfection, chloramine disinfection)	47 MGD

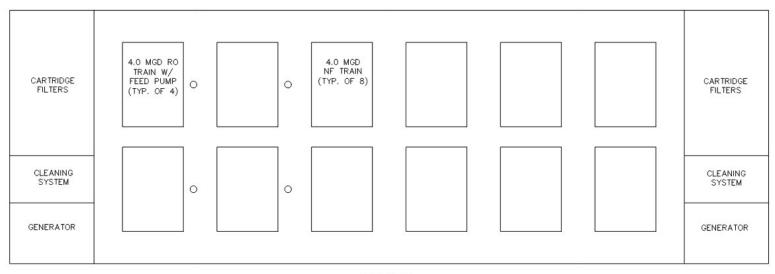


City of West Palm Beach – Membrane Upgrade

Source Water	Raw Water Supply	Treatment Process	Treatment Capacity	Disposal Capacity Required
Surface Water	40 MGD	Nanofiltration (80% Recovery)	32 MGD	8 MGD
Floridan Aquifer	20 MGD	Brackish Water RO (80% Recovery)	16 MGD	4 MGD



City of West Palm Beach – Membrane Upgrade



FLOOR PLAN

FLOOR AREA = 20,000-25,000 SQFT

CARTRIDGE FILTERS/ CLEANING SYSTEM/ GENERATOR	0000 - 00	CARTRIDGE FILTERS/ CLEANING SYSTEM/ GENERATOR	
ELECTRICAL/ CHEMICAL FEED ROOMS	TREATMENT TRAINS	ELECTRICAL/ CHEMICAL FEED ROOMS	

SECTION A - CEILING HEIGHT PROFILE

City of Lake Worth Beach

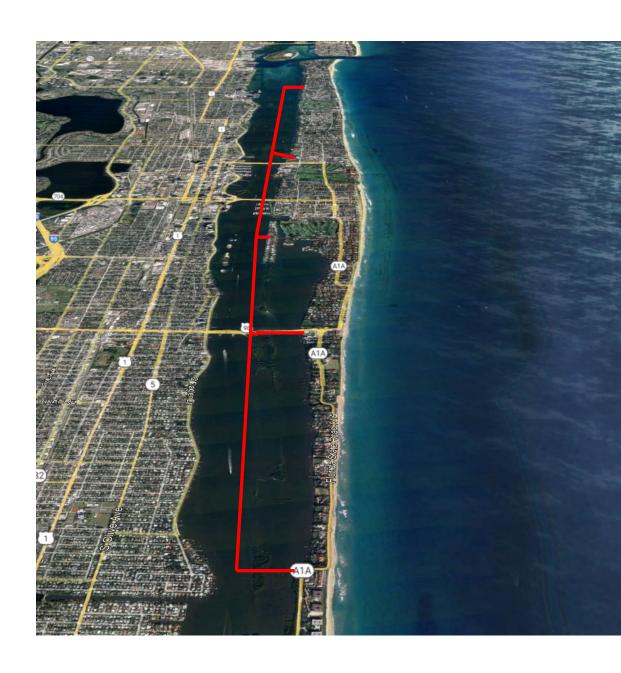
Source Water	Raw Water Supply	Treatment Process	Treatment Capacity			
Existing Cap	Existing Capacity					
Surficial Aquifer	5.1 MGD	Conventional (Lime Softening and filtration)	5.1 MGD			
Floridan Aquifer	6 MGD	Brackish Water RO (70% Recovery)	4.5 MGD			
Future Capa	Future Capacity					
Surficial Aquifer	5.1 MGD	Nanofiltration (80% Recovery)	4.1 MGD			
Floridan Aquifer	20 MGD	Brackish Water RO (75% Recovery)	15 MGD			



Intracoastal Waterway Transmission Line

- FDEP Coordination
- FDOT Coordination
- Risks





Next Steps

- Public Workshop
- Further communication and plan refinement with the City of West Palm Beach
- Further communication and plan refinement with the City of Lake Worth Beach