

G

Water Supply Development Projects

Summary tables of all water supply development projects for the Lower East Coast (LEC) Planning Area are provided in this appendix. Projects with a freshwater source are shown in **Table G-1**. Proposed water supply development projects from 2010 through 2030 that are supplied from a brackish water source are provided in **Table G-2**. Stormwater and surface water capture projects are shown in **Table G-3**. Reclaimed water projects are shown in **Table G-4**. Conservation projects are shown in **Table G-5**. A summary of all water supply development projects that provide new capacity to treat potable and nonpotable water is shown in **Table G-6**. A summary of all new reuse distribution projects and conservation programs, both of which reduce demand for potable water, is shown in **Table G-7**. A summary of all proposed potable, non-potable, and conservation projects is shown in **Table G-8**.

Table G-1. Proposed water supply development projects utilizing a freshwater source.^a

County	Utility/Entity	Project	Completion Date	Total Capital Costs \$M	Cumulative Design Capacity (MGD)	
					2020	2030
Palm Beach	West Palm Beach Public Utilities, City of	Groundwater Seepage Capture Wells Along the M Canal	2015	\$4.80	14.40	14.40
	Palm Beach County Water Utilities Department	Water Treatment Plant 2 Expansion	2025	\$15.00	0.00	8.50
	Seacoast Utility Authority	Nanofiltration Concentrate Blending Pump Station and Reclaimed Water Main	2012	\$4.50	3.00	3.00
	Wellington Public Utilities Department	Water Treatment Plant Low Pressure RO Expansion				
		Phase 1 – 0.5 MGD	2017	\$0.00	0.50	0.50
		Phase 2 – 0.9 MGD	2025	\$0.01	0.00	0.90
Totals				\$24.31	17.90	27.30

a. Key to abbreviations: \$M – millions of dollars; MGD – million gallons per day; RO – reverse osmosis.

Table G-2. Proposed water supply development projects utilizing a brackish water source.^a

County	Utility/Entity	Project	Completion Date	Total Capital Costs \$M	Cumulative Design Capacity (MGD)		
					2020	2030	
Palm Beach	Wellington Public Utilities Department	1.8-MGD Floridan Conversion and Low Pressure RO Upgrade	2025	\$1.00	0.00	1.80	
	Seacoast Utility Authority	Hood Road WTP RO System (includes three Floridan wells and one RO reject well)	2013	\$59.00	3.00	3.00	
Broward	Broward County Water & Wastewater Services	District 1A Treatment Plant Expansion (includes RO treatment facility, Floridan raw production wells, and a RO concentrate disposal well)	2017	\$41.10	1.50	2.50	
	Davie, Town of	RO Addition to New WTP	2012	\$16.00	5.00	6.00	
	Deerfield Beach, City of	West WTP Brackish Water RO Treatment Improvements					
		Phase I	underway	\$5.00	1.50	1.50	
		Phase II	underway	\$2.50	1.50	3.00	
	Fort Lauderdale, City of	Dixie Floridan Water Supply/Treatment Facility	2017	\$22.90	6.00	6.00	
	Hollywood, City of	New Floridan Wells F14 & F15	2018	\$5.00	0.00	0.00	
		New Floridan Wells F16 & F17	2024	\$5.00	0.00	0.00	
		New Floridan Wells F18 & 19	2027	\$5.00	0.00	0.00	
		Additional RO Train E	2017	\$2.10	2.00	2.00	
		Additional RO Train F	2020	\$2.10	0.00	2.00	
	Lauderhill, City of	Floridan Well Drilling Equipping and Testing					
		Phase I	2016	\$2.50	0.00	0.00	
		Phase I – Deep Injection Well Drilling Equipping and Testing	2016	\$5.00	0.00	0.00	
		Phase I – Construction of RO Facility	2017	\$20.00	1.00	1.00	
		Phase II	2017	\$2.50	0.00	0.00	
	Sunrise, City of	Phase II – Construction of RO Facility	2018	\$3.00	0.00	2.00	
		Sawgrass RO WTP Expansion Phases I–II	2019–2024	\$21.60	3.00	6.00	
	Tamarac, City of	Springtree RO WTP Expansion	2021	\$9.60	1.50	3.00	
2.0-MGD RO System		2022	\$19.00	0.00	2.00		
Miami-Dade	Florida City Water and Sewer Department, City of	RO Plant/Brine Treatment RO	planned	\$25.60	4.50	4.50	
		Satellite Treatment	planned	\$12.20	0.50	0.50	
	Miami-Dade Water & Sewer Department	South Miami Heights (17.45 RO and 2.55 Nanofiltration)	2014	\$194.70	17.45	17.45	
		Hialeah Floridan Aquifer RO WTP					
		Phase 1 – 10-MGD RO WTP (including concentrate disposal)	2012	\$112.30	10.00	10.00	
		Phase 2 – 5-MGD Expansion (including concentrate disposal)	2026	\$25.60	0.00	5.00	
	Phase 3 – 2.5-MGD Expansion (including concentrate disposal)	2026	\$12.20	0.00	2.50		
	North Miami Beach, City of	Floridan RO Wells, Lines, Mains, and Treatment Facility					
Phases II–III		planned	\$8.21	12.50	12.50		
			Phase IV	planned	\$37.50	5.00	5.00
Totals				\$678.21	75.95	99.25	

a. Key to abbreviations: \$M – millions of dollars; MGD – million gallons per day; RO – reverse osmosis; WTP – water treatment plant.

Table G-3. Proposed stormwater and surface water capture projects.^a

County	Utility/Entity	Project	Water Source Type	Completion Date	Total Capital Costs \$M	Cumulative Design Capacity (MGD)	
						2020	2030
Palm Beach	West Palm Beach Public Utilities, City of	ASR Well Reactivation at Clear Lake	surface water	2020	\$10.00	10.00	10.00
Miami-Dade	Florida City Water and Sewer Department, City of	Stormwater Reuse Program	stormwater	planned	\$13.50	0.35	0.35
		Friedland Manor Stormwater for Indirect Potable Use	stormwater	planned	\$30.30	0.65	0.65
Totals					\$53.80	11.00	11.00

a. Key to abbreviations: ASR – aquifer storage and recovery; \$M – millions of dollars; MGD – million gallons per day.

Table G-4. Reclaimed water development projects.^a

County	Utility/Entity	Project	Completion Date	Total Capital Costs \$M	Cumulative Distribution Capacity (MGD)		Cumulative Treatment Capacity (MGD)	
					2020	2030	2020	2030
Palm Beach	Boca Raton, City of	Recycling of Membrane Concentrate for Reuse Water	2013	\$2.00	4.25	4.25		
	Boynton Beach, City of	Reclaimed Water Transmission – Phase 2 (US 1 Corridor & Cypress Creek)	2014	\$2.00	1.00	1.00		
		Leisureville Golf Course	2014	\$2.00	0.65	0.65		
		Seacrest Boulevard Reclaimed Water Line	2013	\$0.26	0.10	0.10		
	Delray Beach Water and Sewer Department, City of	Reclaimed Water (Area 12A Phase 1 – Barrier Island South, Atlantic Avenue to Casuarina Road – Gleason Street trunk line)	2013	\$1.70	0.25	0.25		
		Reclaimed Water (Area 12A Phase 2 and Area 12B Barrier Island South)	2014	\$1.20	0.25	0.25		
	Palm Beach County Water Utilities Department	Morikami Reclaimed Pump Station	2013	\$0.05	2.00	2.00		
	Wellington Public Utilities Department	Phased Reclaimed System Expansions	2011-2030	\$0.01	1.3	2.90		
Broward	Broward County Water & Wastewater Services	Reclaimed Water Highlands Pompano Beach	2013	\$6.50	0.30	0.30		
	Davie, Town of	3.5-MGD Reclaimed Water Facility	2017	\$7.50			3.50	3.50
	Margate, City of	WWTP Effluent Reuse System	2015	\$9.50			1.50	1.50
	North Springs Improvement District	Water Reuse Plant	2017	\$0.00			4.00	4.00
	Pompano Beach, City of	Reuse Distribution Expansion FY 2007–FY 2025	underway	\$5.70	1.40	2.20		
		Broward County Reuse	underway	\$0.00	0.10	0.10		
	Sunrise, City of	Irrigation Reuse at the Sawgrass WWTP	2018	\$0.00			2.00	4.00
Miami-Dade	Miami-Dade Water & Sewer Department	North District WWTP Reuse	2025	\$13.50			0.00	7.00
		Central District WWTP Reuse	2025	NA			0.00	27.10
		West District Canal Water Reclamation Plant Recharge						
		Phase 2	2021	\$623.00			0.00	29.50
		Phase 3	2026	\$654.00			0.00	22.50
		Biscayne Coastal Wetlands Rehydration	2022	\$1,120.00	0.00	89.00		
		FPL – South District WWTP	2021	\$95.00	0.00	90.00		
Monroe	Florida Keys Aqueduct Authority	Reclaimed Water Systems in Unincorporated Monroe County	2015	\$12.00			1.00	2.10
Totals				\$2,555.92	11.60	193.00	12.00	101.20

a. Key to abbreviations: \$M – millions of dollars; FPL - Florida Power & Light; FY – Fiscal Year; MGD – million gallons per day; NA – not applicable; WWTP – wastewater treatment plant.

Table G-5. Proposed water conservation projects.^a

County	Utility/Entity	Project	Completion Date	Total Capital Costs \$M	Cumulative Design Capacity (MGD)	
					2020	2030
Broward	Broward County Water Partnership (includes municipalities of Coconut Creek, Cooper City, Coral Springs, Broward County, Dania Beach, Davie, Deerfield Beach, Fort Lauderdale, Hallandale Beach, Hollywood, Hillsboro Beach, Lauderhill, Margate, Miramar, Pembroke Pines, Plantation, and Sunrise)	High Efficiency Toilet Replacement and Conservation Devices/Credit Program	underway	\$0.00	0.00	30.00
	Pompano Beach, City of	Conservation and Irrigation Restrictions	2025	\$0.00	0.10	0.10
Miami-Dade	Miami-Dade Water & Sewer Department	Conservation Program	2030	\$20.00	12.01	15.19
Monroe	Florida Keys Aqueduct Authority	Low Flow Fixture Distribution	2011	\$0.25	0.10	0.15
Totals				\$20.25	12.21	45.44

a. Key to abbreviations: \$M – millions of dollars; MGD – million gallons per day.

Table G-6. Summary of proposed water supply development projects by source.^a

Potable/Nonpotable	Project Type	Number of Projects	Cost \$M	Cumulative Design Capacity (MGD)	
				2020	2030
Potable	Freshwater Source	5	\$24.31	17.90	27.30
	Brackish Water Source	28	\$678.21	75.95	99.25
Nonpotable	Stormwater and Surface Water Capture	3	\$53.80	11.00	11.00
	Reclaimed New Treatment Capacity	9	\$1319.50	12.00	101.20
Totals		45	\$2,075.82	116.85	238.75

a. Key to abbreviations: \$M – millions of dollars; MGD – million gallons per day.

Table G-7. Summary of proposed new reuse distribution capacity and conservation programs.^a

Project Type	Number of Programs	Cost \$M	Cumulative Design Capacity (MGD)	
			2020	2030
Conservation	4	\$20.25	12.21	45.44
Reclaimed new distribution capacity	13	\$1236.42	11.60	193.00

a. Key to abbreviations: \$M – millions of dollars; MGD – million gallons per day.

Table G-8. Summary of all proposed potable, non-potable, and conservation projects.^a

Project Type	Number of Projects/Programs	Cost \$M	Cumulative Design Capacity (MGD)	
			2020	2030
Potable	33	\$702.52	93.85	126.55
Non-Potable	12	\$1373.3	23.00	112.20
Conservation	4	\$20.25	12.21	45.44
Totals	49	\$2096.07	129.06	284.19

a. Key to abbreviations: \$M – millions of dollars; MGD – million gallons per day.