

Purchased Utility Service Area



NOT TO SCALE



Wastewater



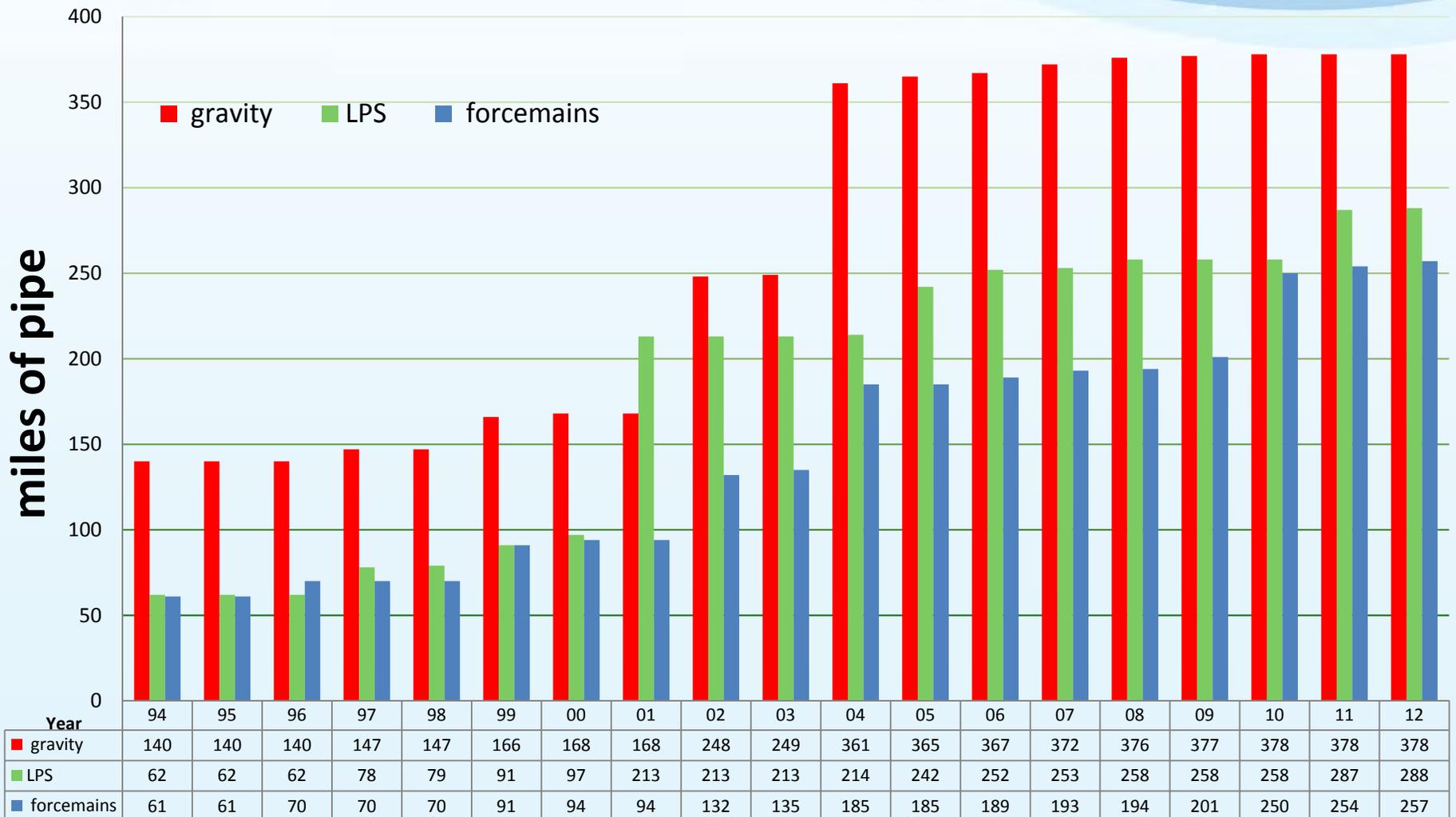


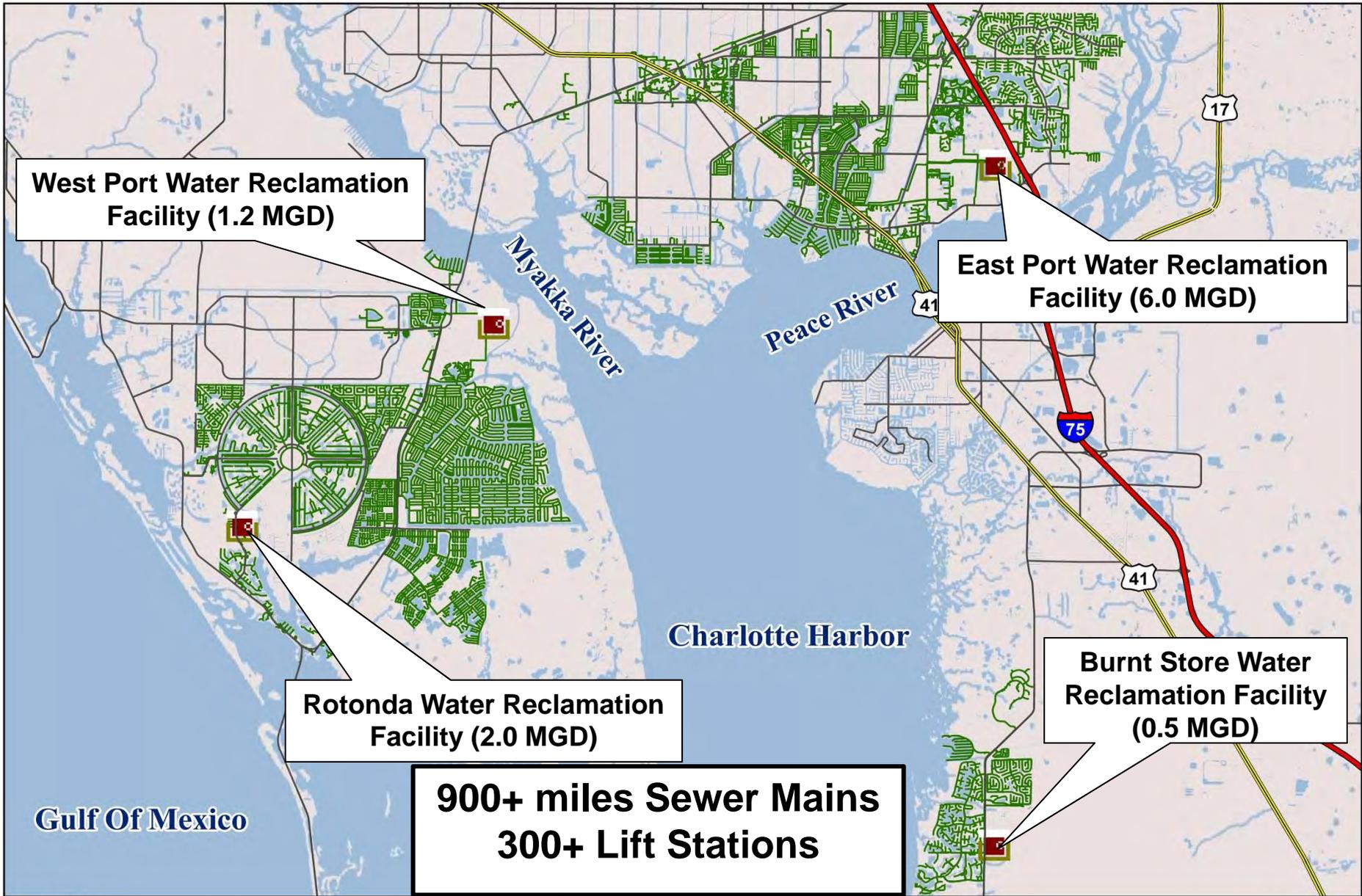
CCU Sewer Connections





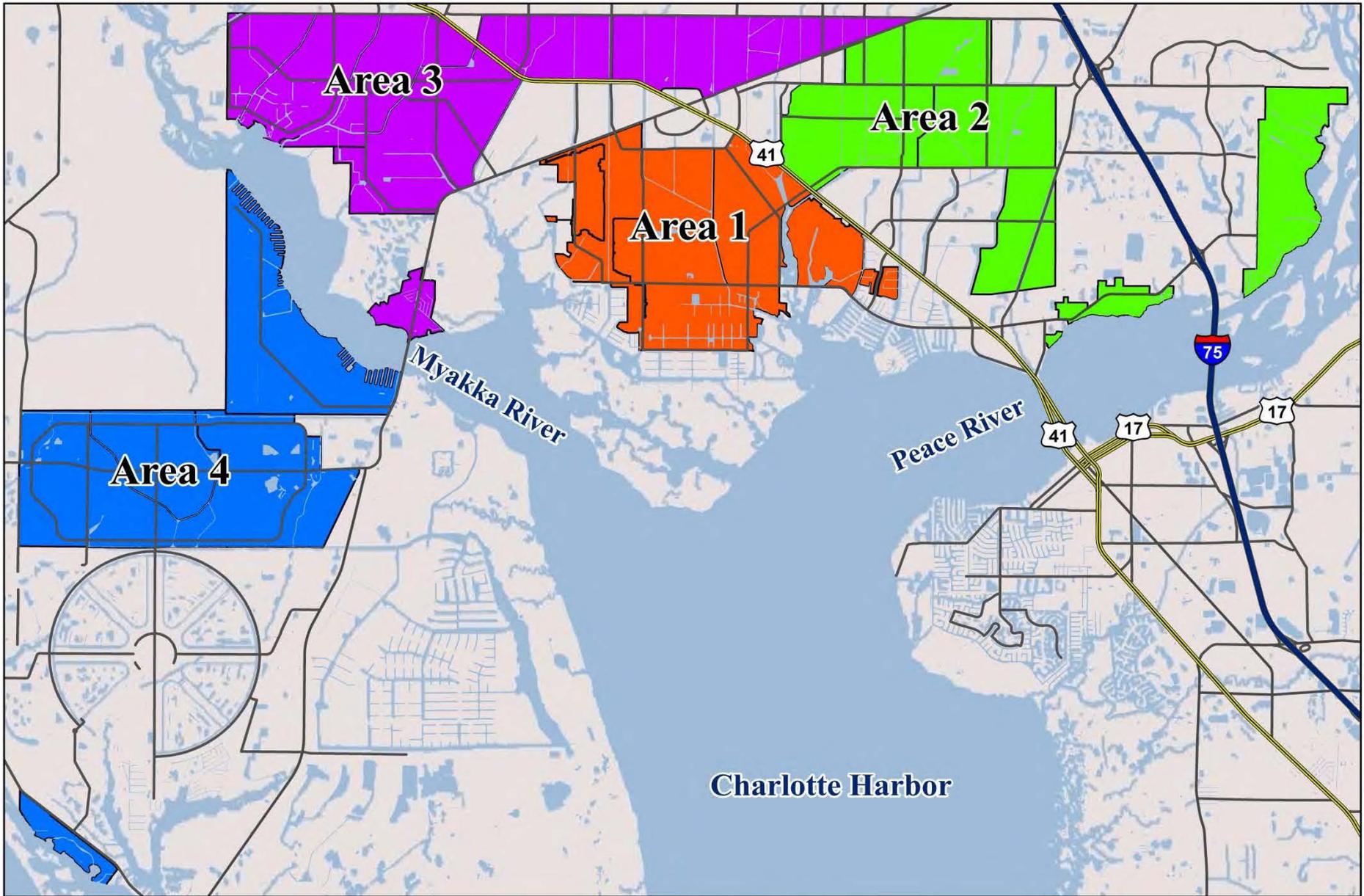
Wastewater Infrastructure Inventory





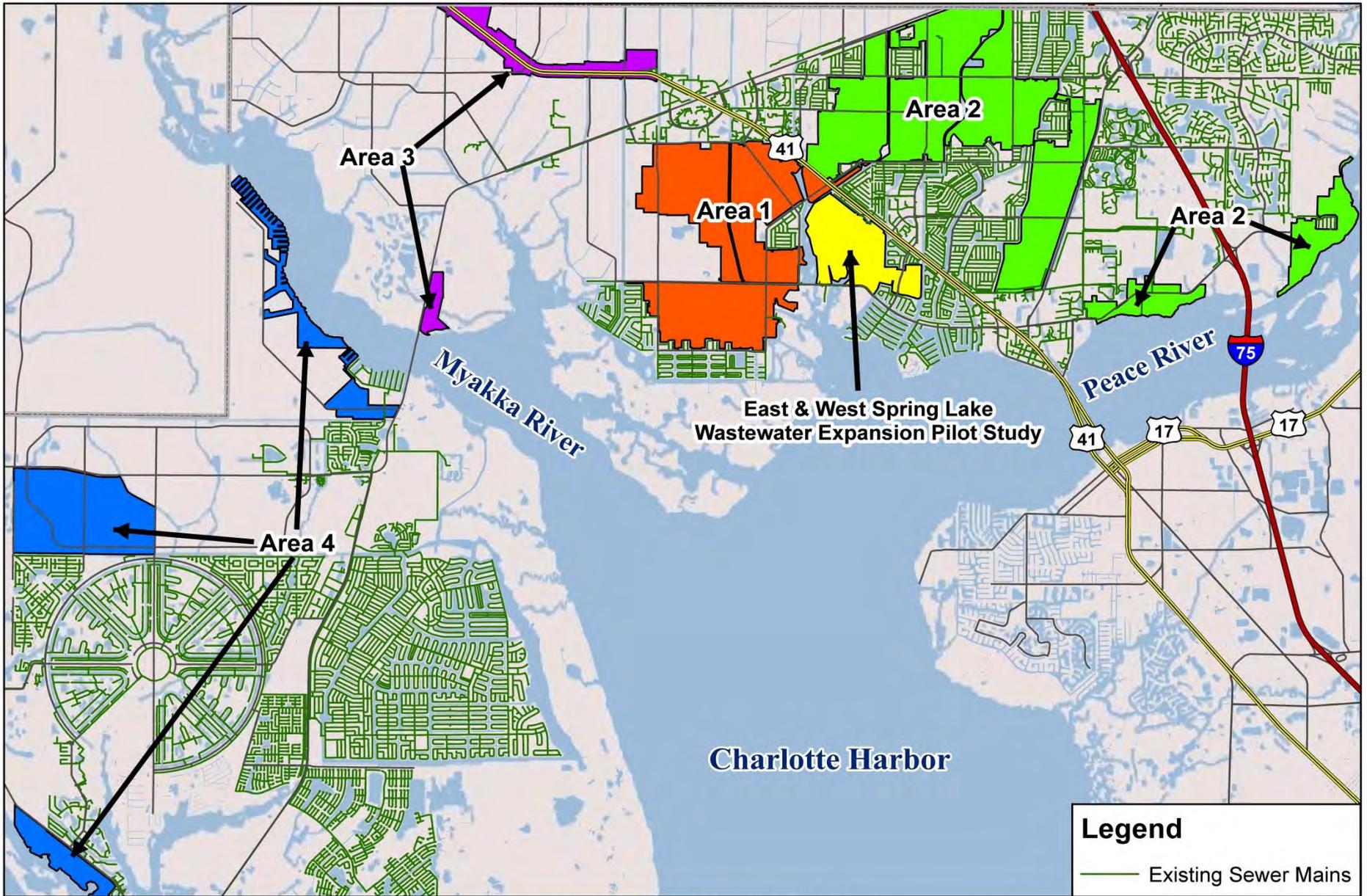
Charlotte County Utilities Existing Wastewater Infrastructure





Charlotte County Utilities 2009 Proposed Wastewater Expansion Areas





East & West Spring Lake
Wastewater Expansion Pilot Study

Charlotte Harbor

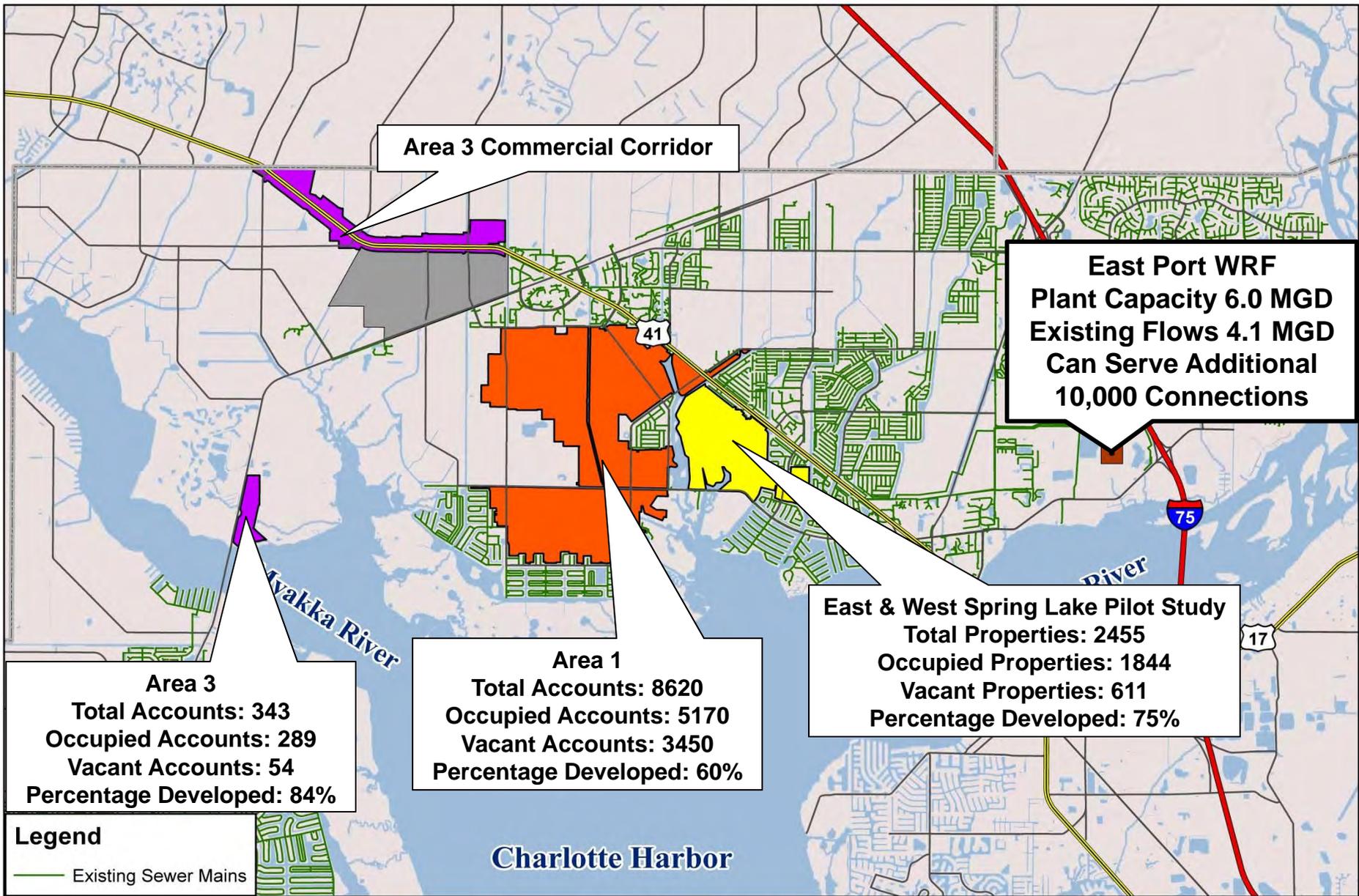
Legend

— Existing Sewer Mains



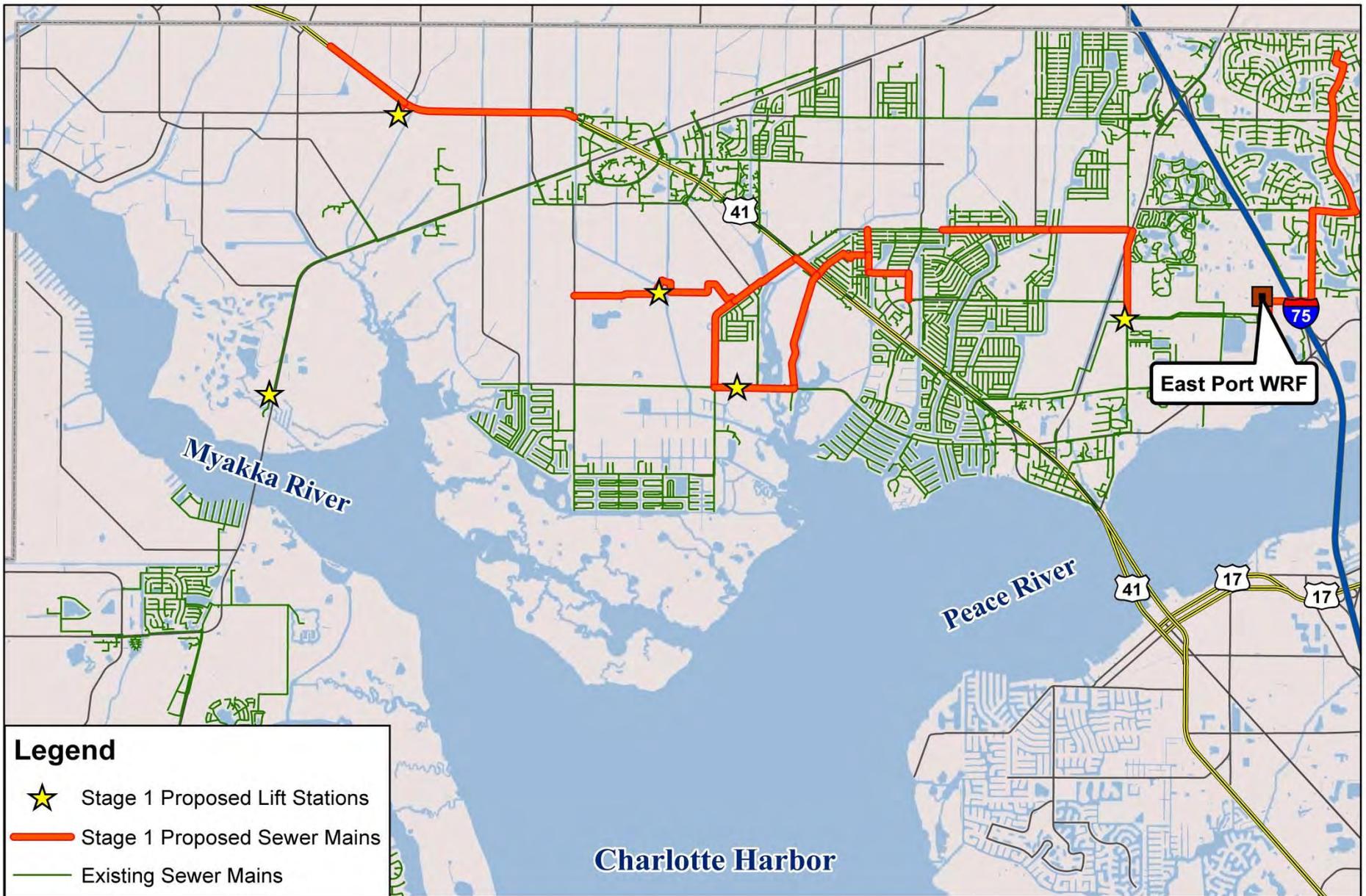
Charlotte County Utilities
2013 Proposed Wastewater Expansion Plan
Commercial Land Or 50% Greater Developed Residential Land





Charlotte County Utilities
Stage 1: Proposed Wastewater Expansion Plan
Existing East Port WRF

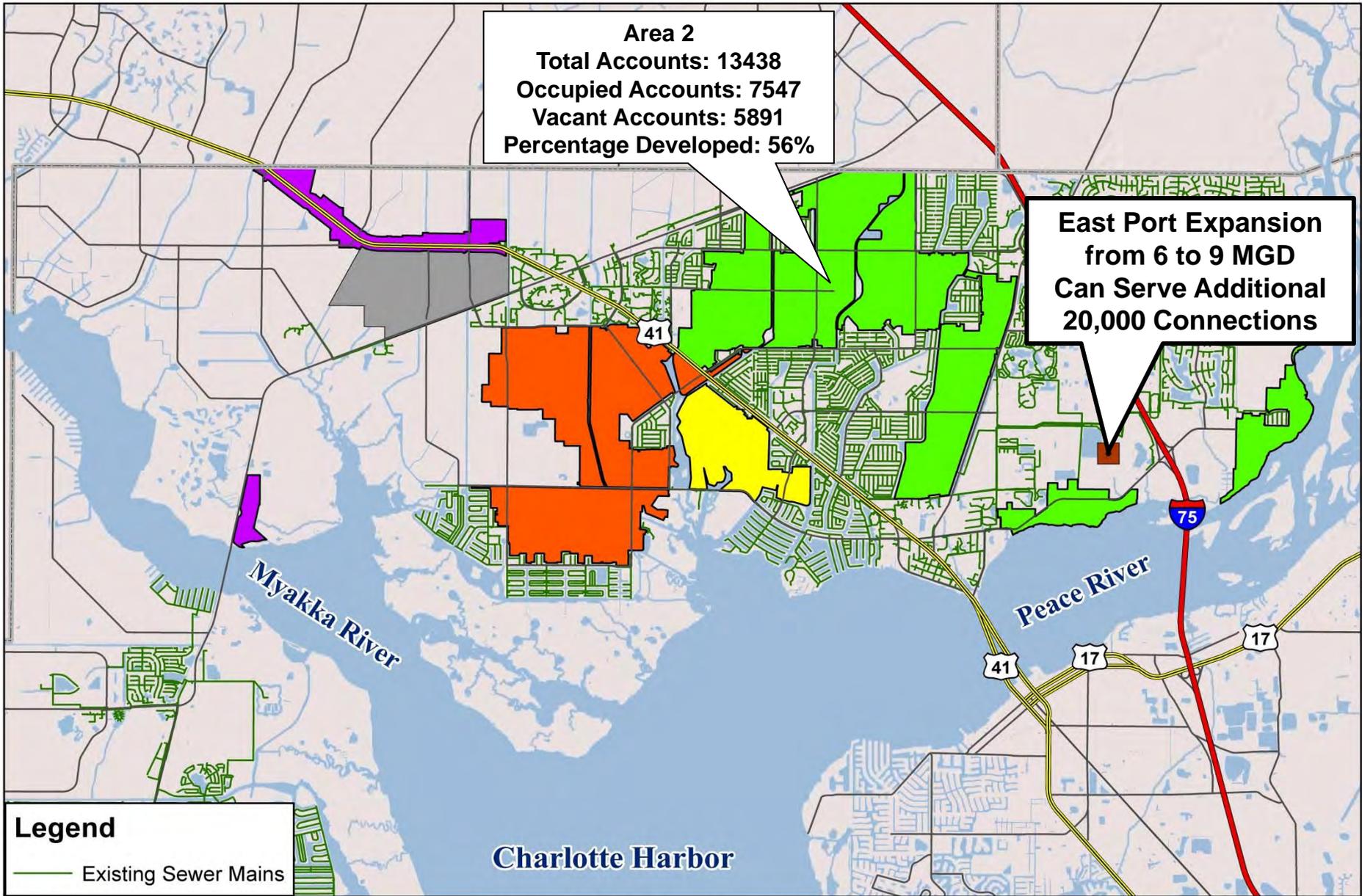




Charlotte County Utilities

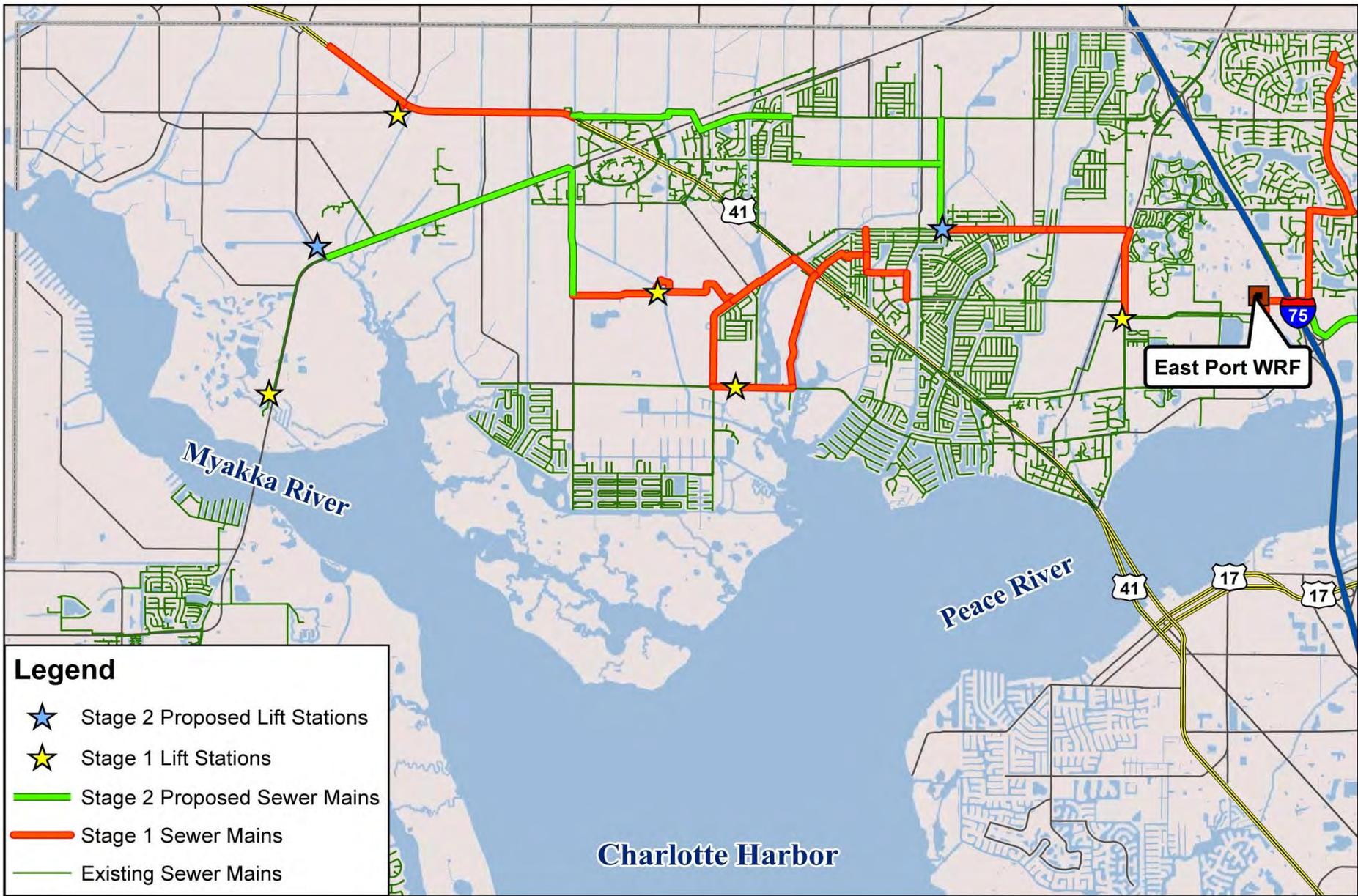
Stage 1: Mid County Master Wastewater Plan





Charlotte County Utilities
Stage 2: Proposed Wastewater Expansion Plan
Permitted East Port WRF





Legend

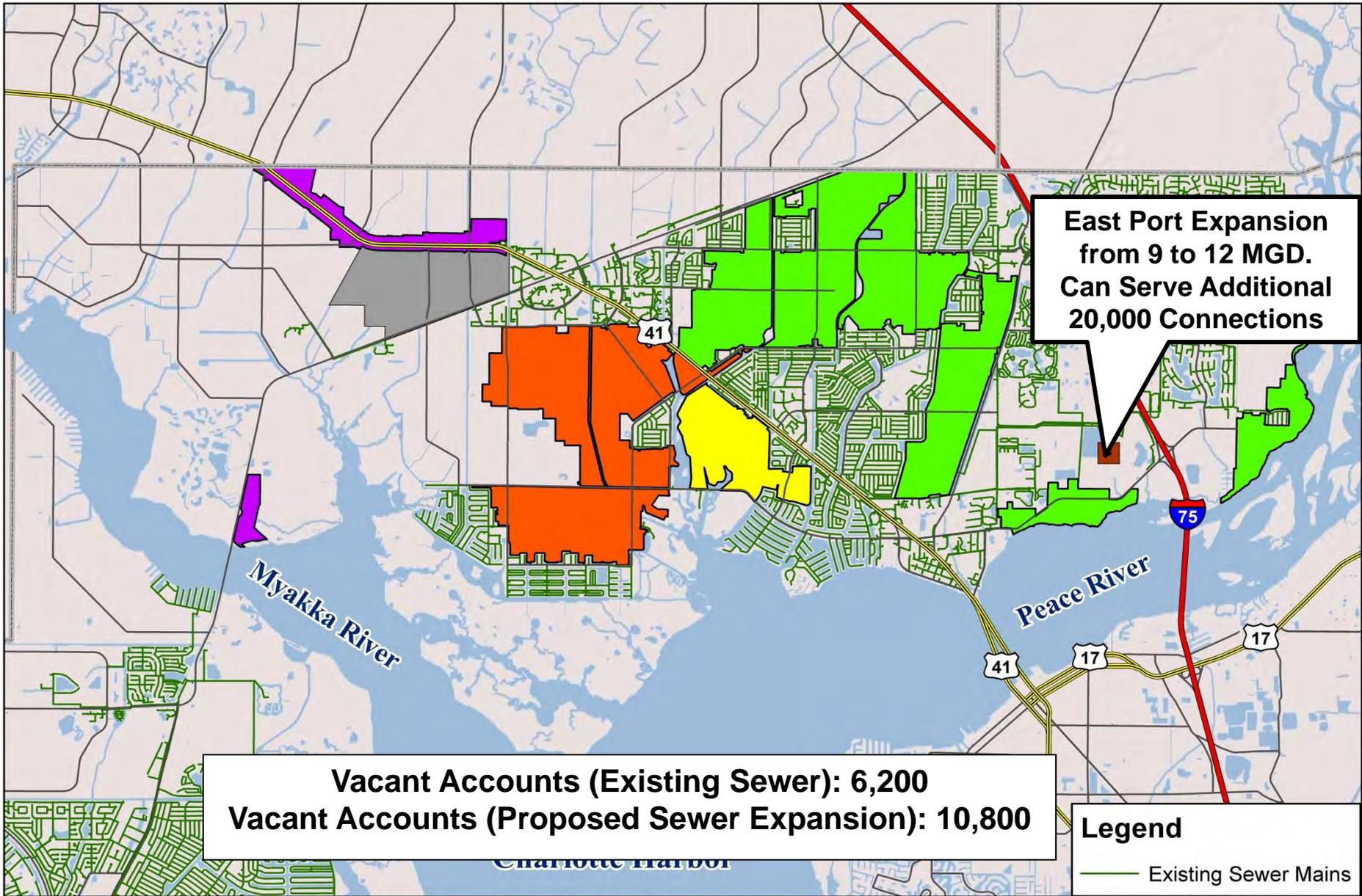
- ★ Stage 2 Proposed Lift Stations
- ★ Stage 1 Lift Stations
- Stage 2 Proposed Sewer Mains
- Stage 1 Sewer Mains
- Existing Sewer Mains



Charlotte County Utilities

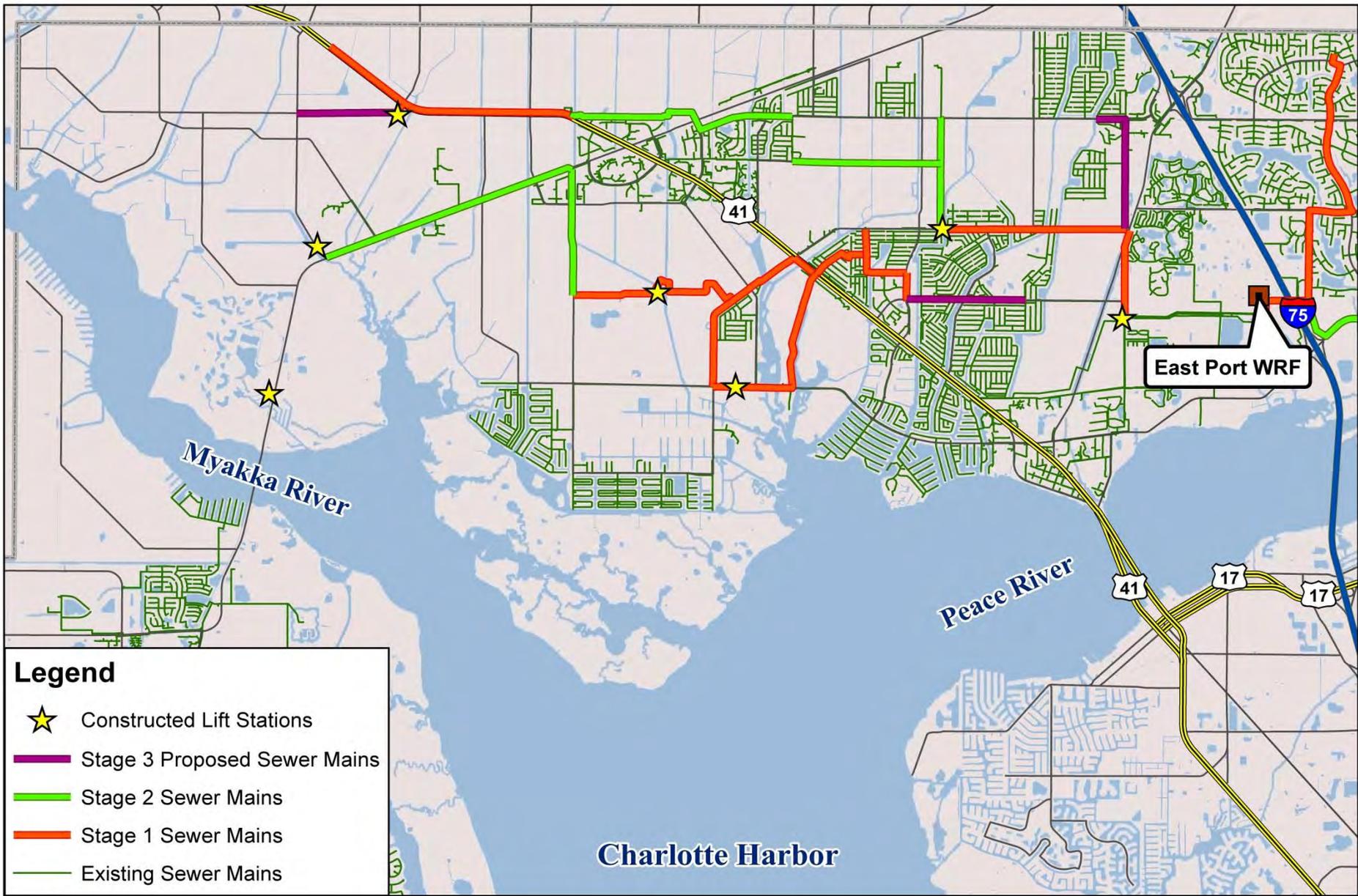
Stage 2: Mid County Master Wastewater Plan





Charlotte County Utilities
Stage 3: Mid County Wastewater Infill
Expansion of East Port WRF





Legend

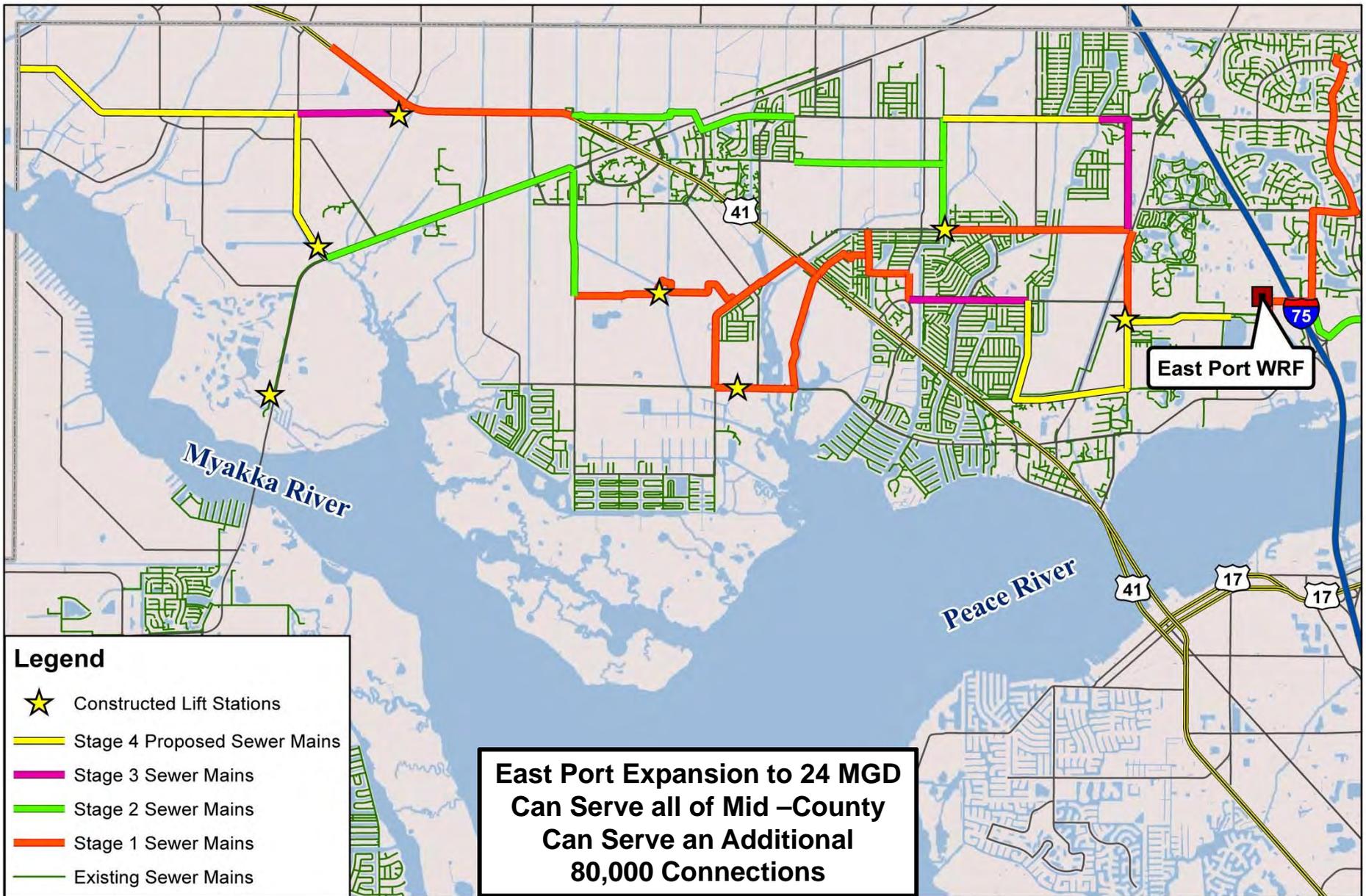
- ★ Constructed Lift Stations
- Stage 3 Proposed Sewer Mains
- Stage 2 Sewer Mains
- Stage 1 Sewer Mains
- Existing Sewer Mains



Charlotte County Utilities

Stage 3: Mid County Master Wastewater Plan





Legend

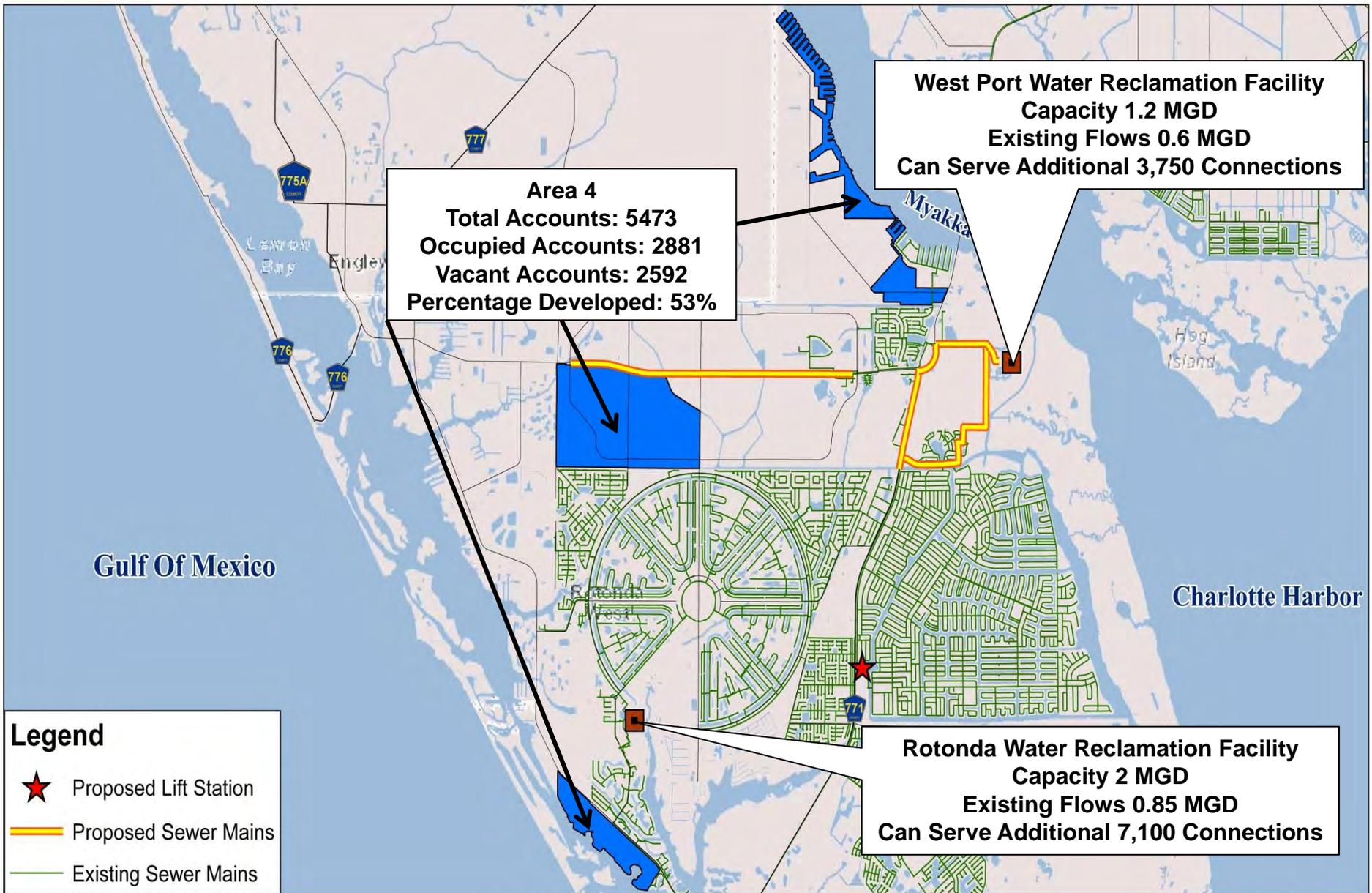
- ★ Constructed Lift Stations
- Stage 4 Proposed Sewer Mains
- Stage 3 Sewer Mains
- Stage 2 Sewer Mains
- Stage 1 Sewer Mains
- Existing Sewer Mains

**East Port Expansion to 24 MGD
Can Serve all of Mid –County
Can Serve an Additional
80,000 Connections**



Charlotte County Utilities Mid County Full Build Out Wastewater Plan

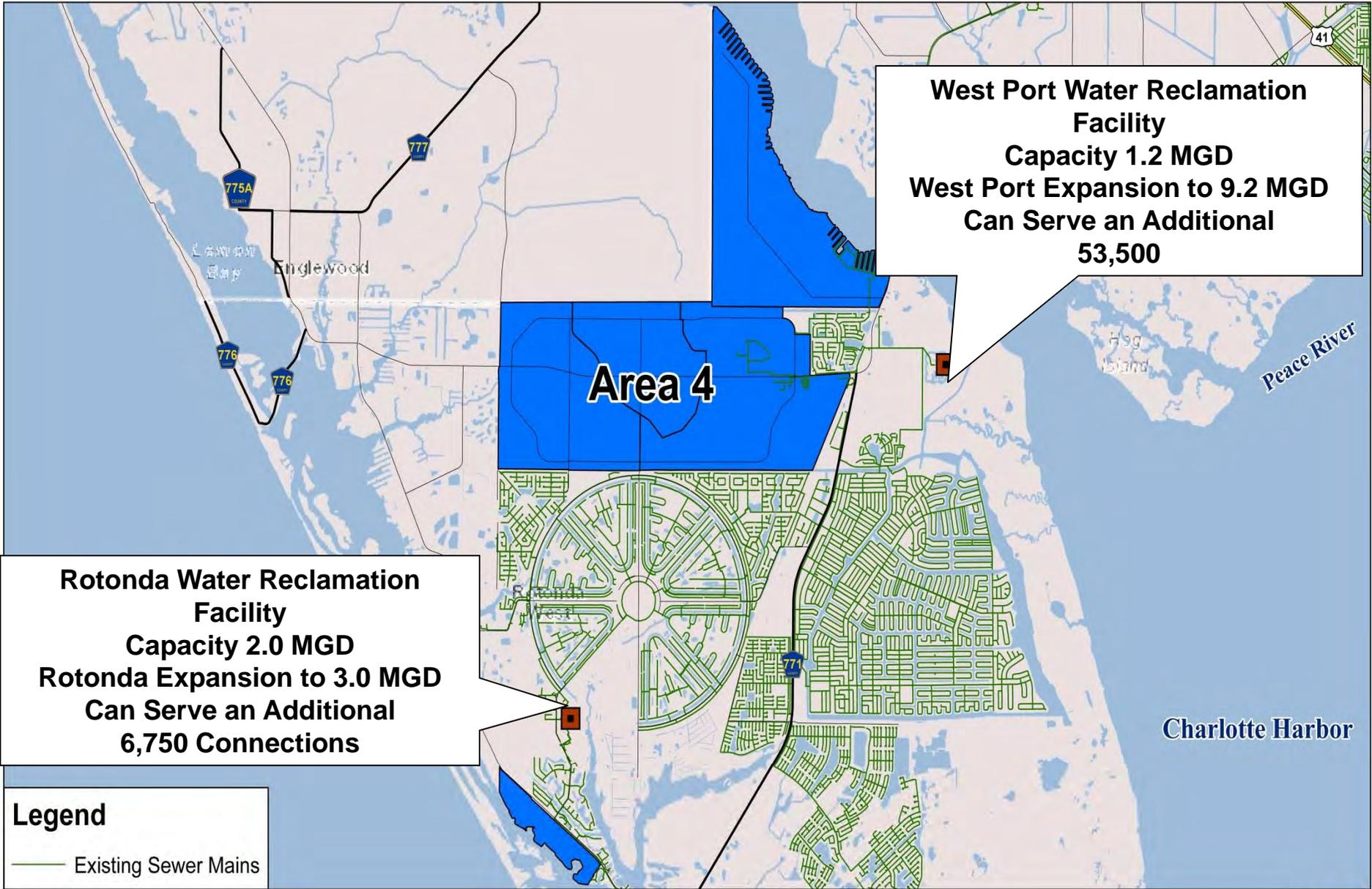




Charlotte County Utilities
2013 Proposed Wastewater Expansion Plan
50% Greater Developed Residential Land



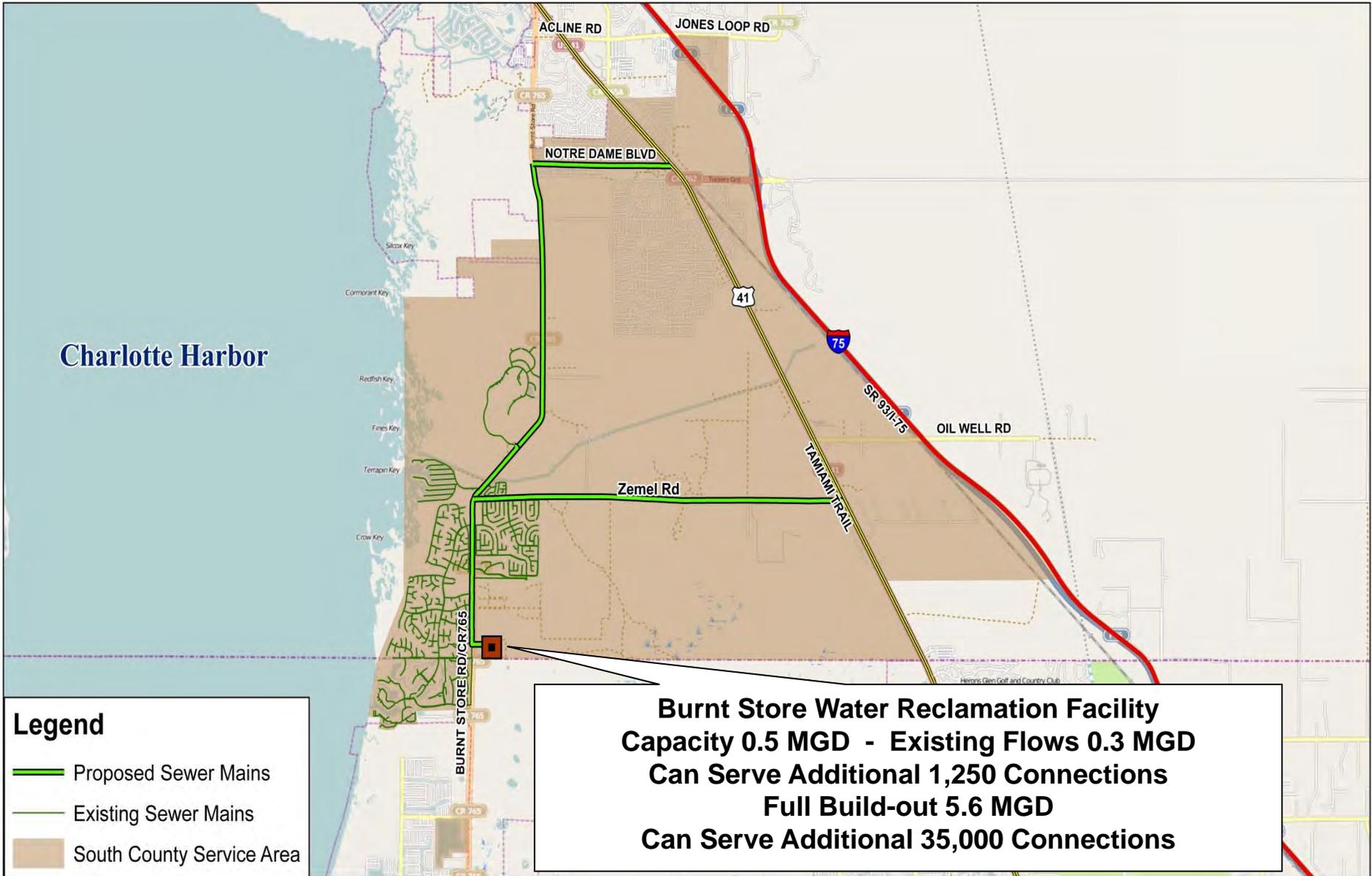
NOT TO SCALE



Charlotte County Utilities
West County Proposed Wastewater Expansion Plan Full Build Out



NOT TO SCALE



Charlotte County Utilities

South County Full Build Out Master Wastewater Plan



NOT TO SCALE



Reclaimed Water





Why Use Reclaimed Water?

Environmental:

- Protects environment by helping to prevent salt water intrusion inland caused by excessive ground water withdrawals for irrigation
- Saves utility customers money by reducing the need to develop new potable water supplies

Regulation:

- Compliance with State's long term goal to conserve water by utilizing 75% of all wastewater flows for potable water offsets
- Compliance with existing permits allows future expansion of treatment and storage facilities to meet future growth

Financial Consequences:

- New Desalination Plant
\$10 to \$12 / 1,000gal
- New Reverse Osmosis Water Treatment Plant and Babcock Ranch Wellfield
\$4.00 to \$4.50 / 1,000gal



Cost of Reclaimed Water Distribution

Line No.	Description	Existing System Capital Costs	Existing System Equiv Annual Cost	Phase 1-3 Expansion Capital Costs	Phase 1-3 Equiv Annual Cost	Total System Capital Costs	Total System Equiv Annual Cost
	Capital Investment:						
1	On-Site Facilities [1]	\$ 1,610,595.00	\$ 89,004.00	\$ 3,133,198.00	\$ 173,145.00	\$ 4,743,793.00	\$ 262,148.00
2	Transmission Mains [1]	10,124,463.00	559,491.00	9,952,540.00	549,991.00	20,077,003.00	1,109,482.00
3	Storage [1]	1,219,912.00	72,050.00	1,909,240.00	112,762.00	3,129,152.00	184,812.00
4	Pump Stations [1]	2,064,917.00	153,938.00	4,425,500.00	329,918.00	6,490,417.00	483,856.00
5	Total Capital Cost	\$ 15,019,887.00	\$ 874,483.00	\$ 19,420,478.00	\$ 1,165,816.00	\$ 34,440,365.00	\$ 2,040,299.00
6	Less Grants Received/Applied For	4,165,005.00	335,538.00	-	-	13,875,244.00	1,501,354.00
7	Total CCU Capital Investment	\$ 10,854,882.00	\$ 538,945.00	\$ 19,420,478.00	\$ 1,165,816.00	\$ 20,565,121.00	\$ 538,945.00
8	Amortized Capital Cost[2]		\$ 538,945.00				\$ 663,713.00
9	Renewal & Replacement[3]		42,839.00				78,000.00
10	Operating Expenses:						
11	Electric Pumping Cost[4]		106,000.00				162,000.00
12	Other Operating Cost[5]		-				67,000.00
13	Total Operating Expenses		\$ 106,000.00				\$ 597,000.00
14	Total Revenue Requirements		\$ 687,784.00				\$ 970,713.00
15	Daily Revenue Requirement		\$ 1,884.00				\$ 2,659.00
16							
17	Reclaimed Production @ Plants		5.9 MGD				8.5 MGD
18	Cost to produce 1000 gals if all production is sold		\$0.32				\$0.31 w/ 50% Grants
							\$0.76 w/o Grants
19	Reclaimed Sent to Customers @ present time		3.003 MGD				
20	Cost to produce 1000 gals with existing sales		\$0.63				

Notes:

CCU Life Estimate for Assets:

[1] Cost to Produce per 1000 gallons based on sales/demand

On-site facilities & Transmission Mains: 100 years

[2] Amortization based on the average service life of the facilities an an annual capital cost of 5.5%

Storage Facilities : 50 years

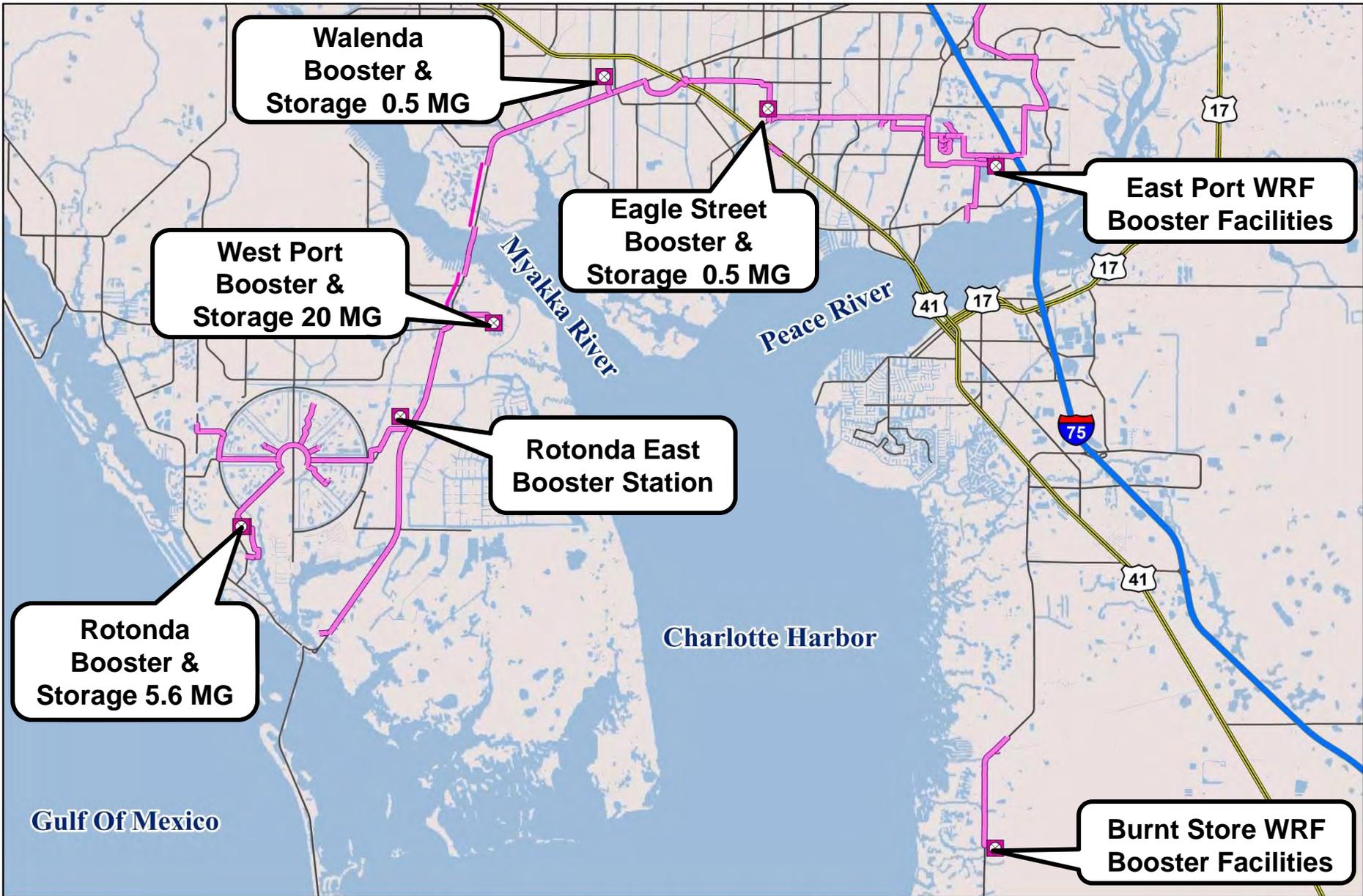
[3] Based on renewal and replacement funding level equal to 5.0% of revenue

Pumping Facilities: 25 years

[4] Per CCU staff based on actual operating expense.

[5] Based on one additional line technician.

Equivalent Annual Cost (EAC) = Net Present Value/Annuity Factor

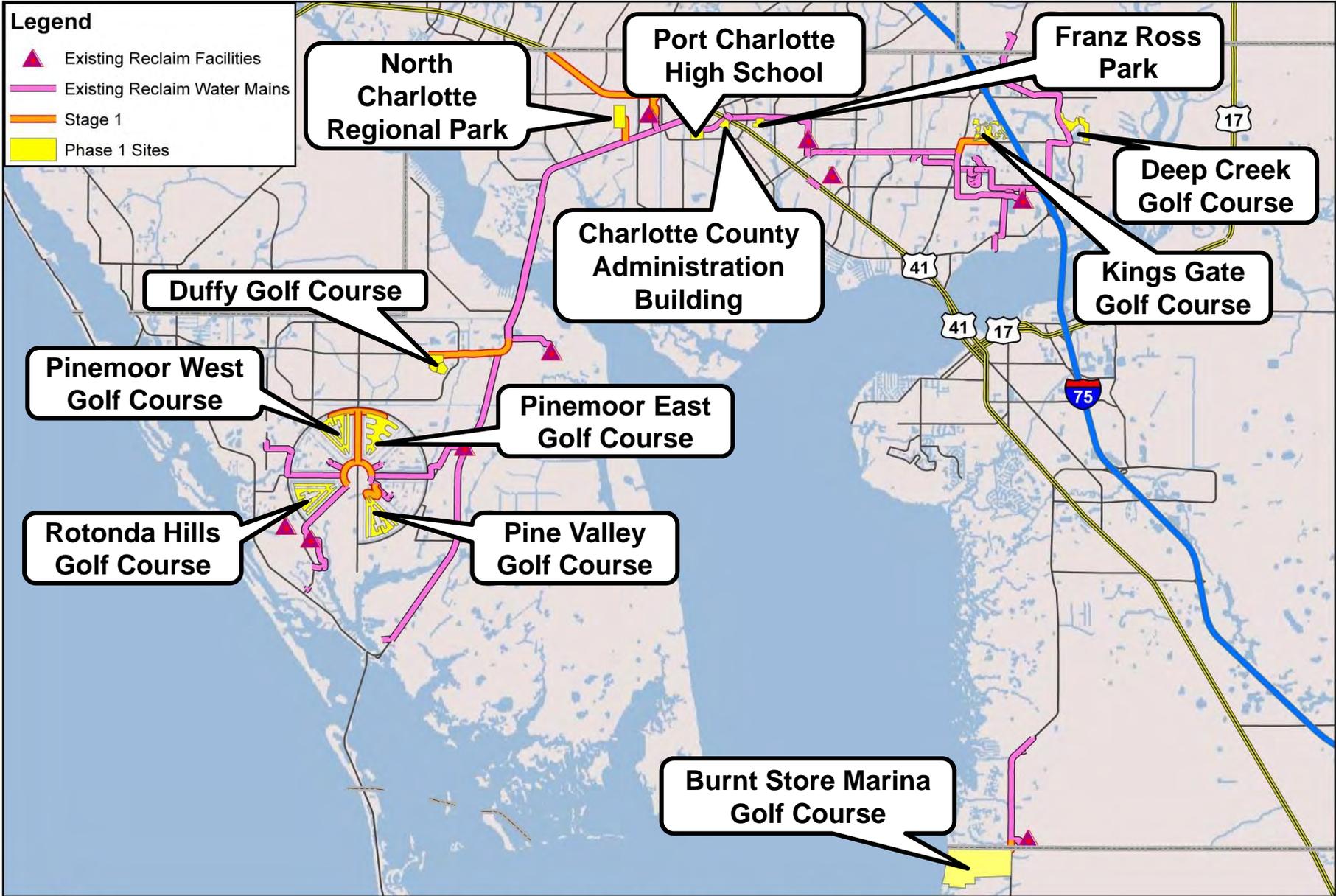


Charlotte County Utilities Existing Reclaimed Water Infrastructure



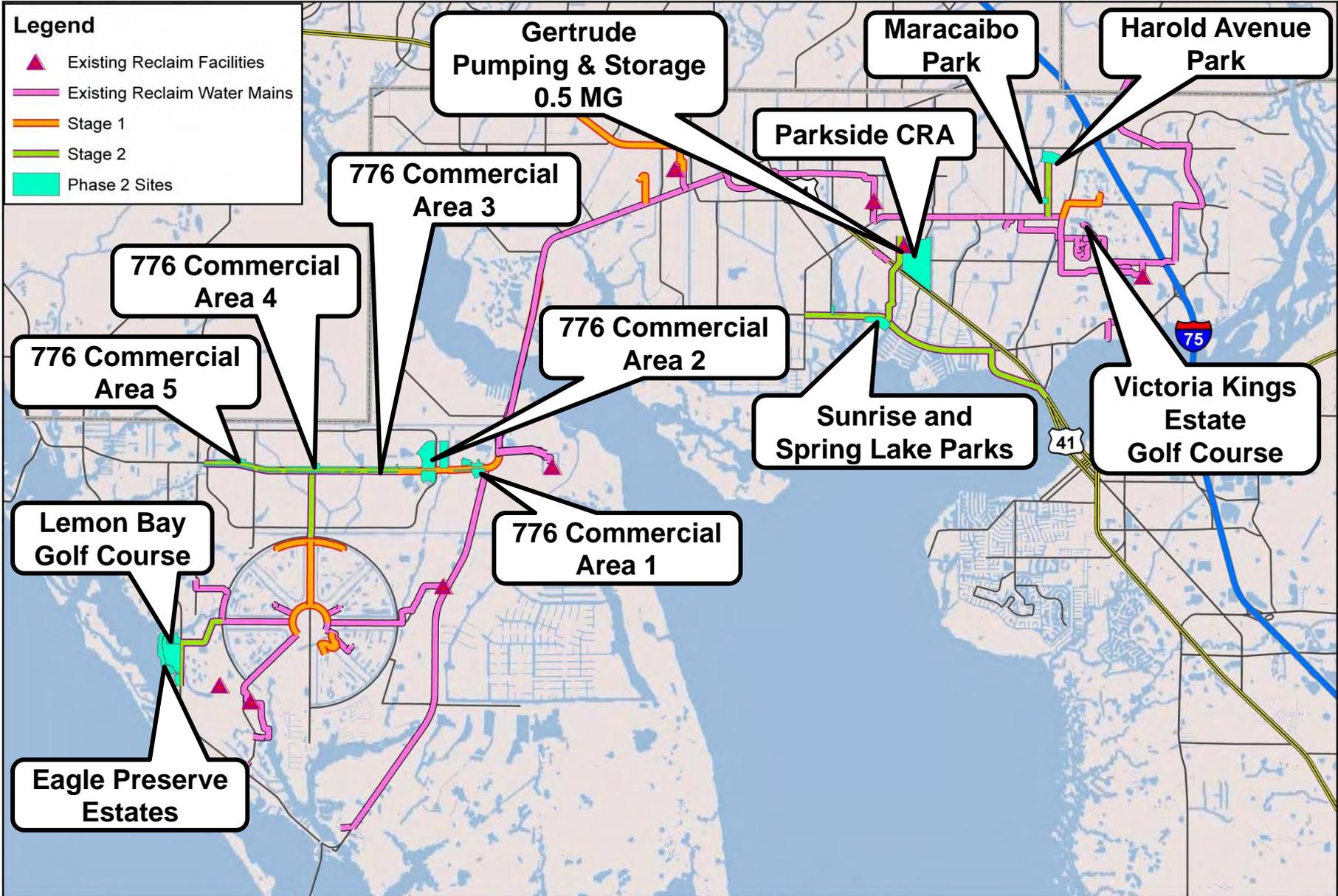
Legend

-  Existing Reclaim Facilities
-  Existing Reclaim Water Mains
-  Stage 1
-  Phase 1 Sites



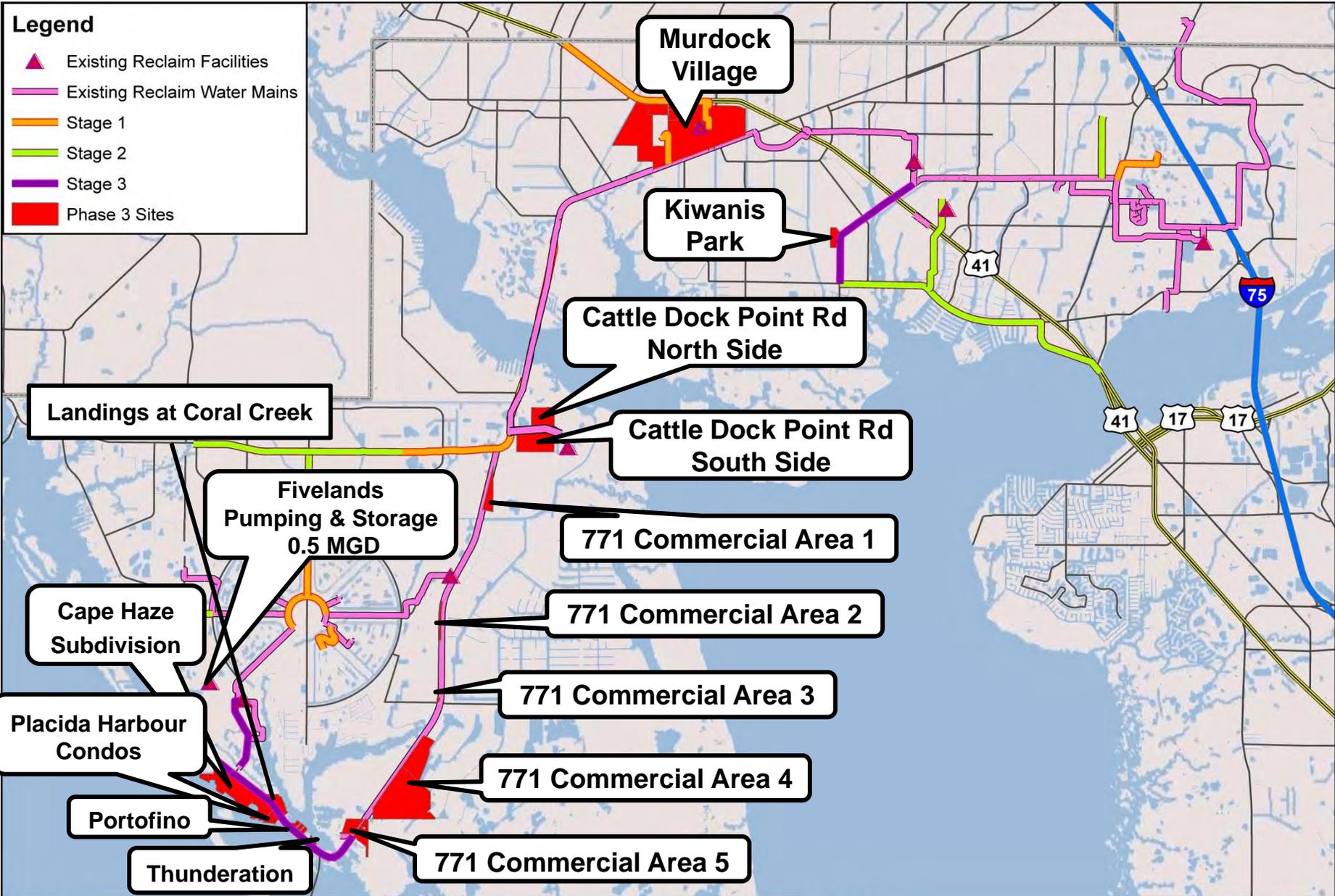
Charlotte County Utilities
Phase 3 - Stage 1: Proposed Reclaimed Water Users





Charlotte County Utilities
Phase 3 - Stage 2: Proposed Reclaimed Water Users





Charlotte County Utilities
Phase 3 - Stage 3: Proposed Reclaimed Water Users





Reclaimed Water Dry Season Production and Usage

Plant	Production*	Sent to Users*	Total Available*
East Port WRF (current)	4.1	1.5	2.6
Rotonda WRF (current)	0.9	0.9	0.0
West Port WRF (current)	0.6	0.6	0.0
TOTAL (current)	5.6	3.0	2.6
WASTEWATER EXPANSION (Additional 17,000 Connections)	2.6		5.2
TOTAL DEMAND PHASE 3 STAGES 1-3		3.5	1.7
Burnt Store WRF (current)	0.3	0.003	0.297
Burnt Store (future demand)		0.297	0

* Flow in Million Gallons per Day (MGD)

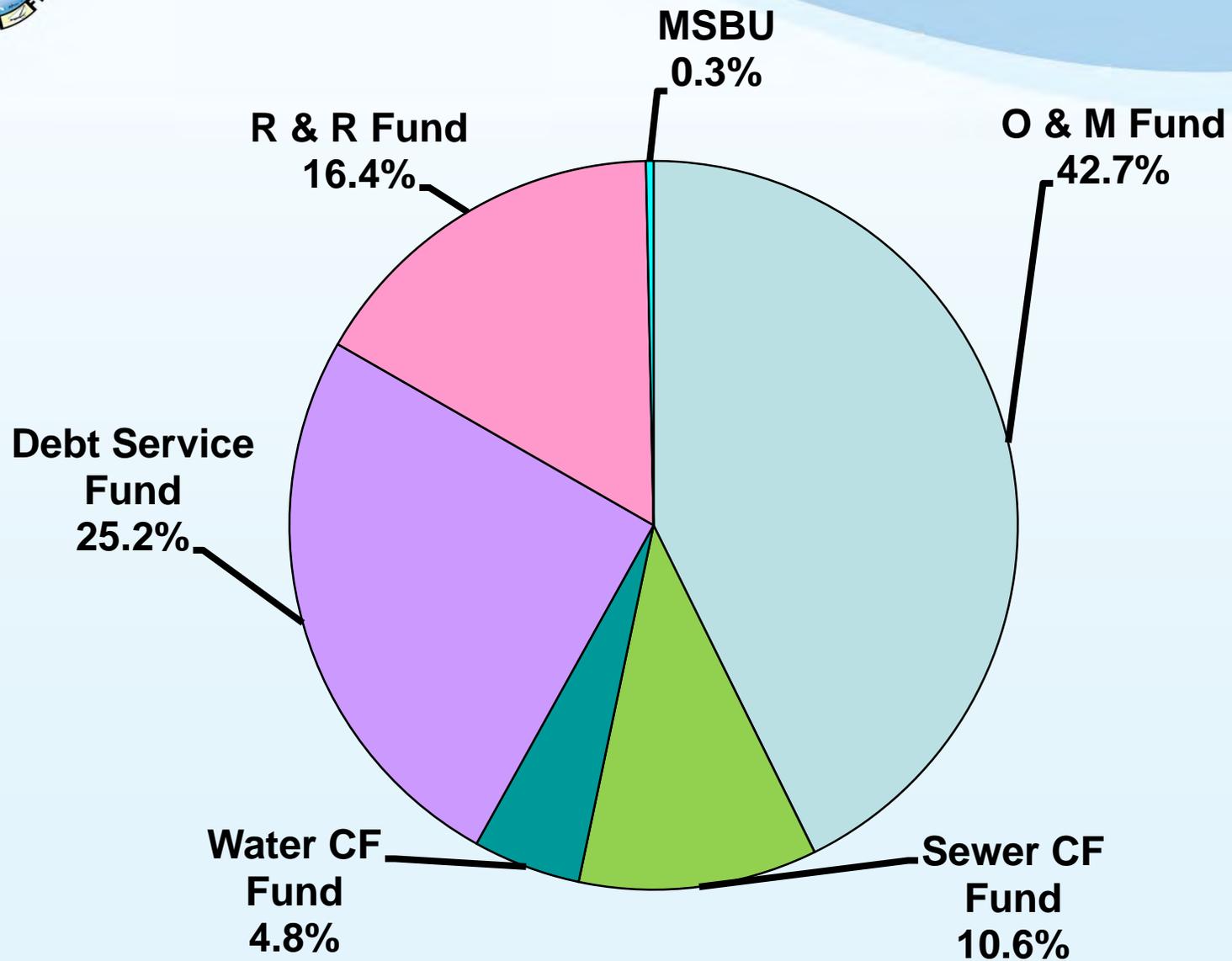


Finance



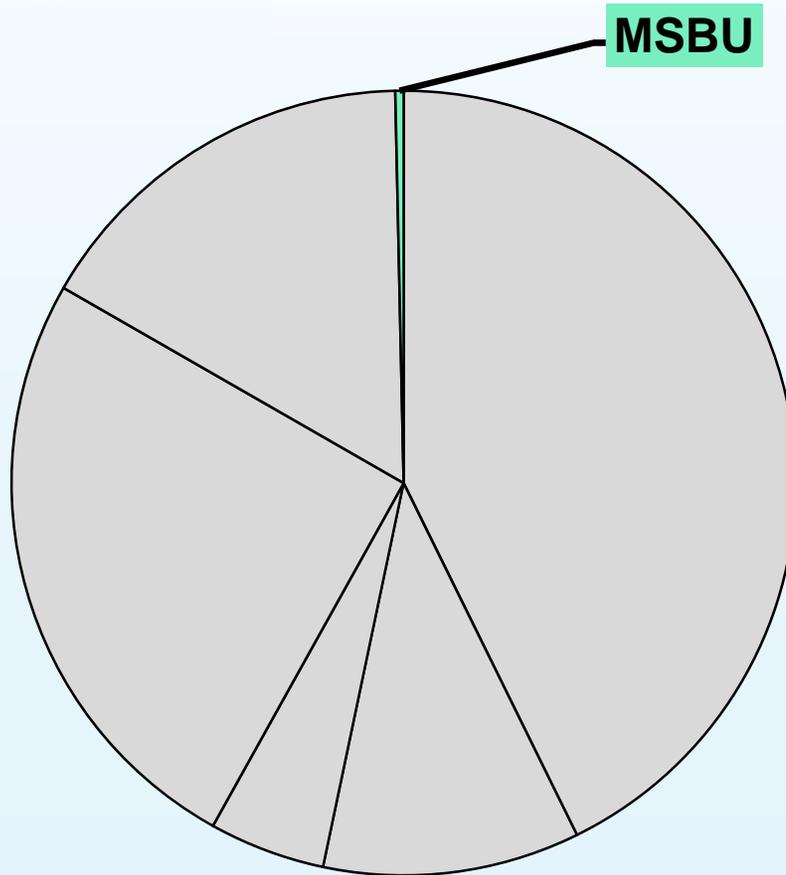


FY 12/13 Net Budget \$93,818,051





Municipal Service Benefit Unit (MSBU) Funds



Percent of Budget: 0.3%

Amount: \$319,093

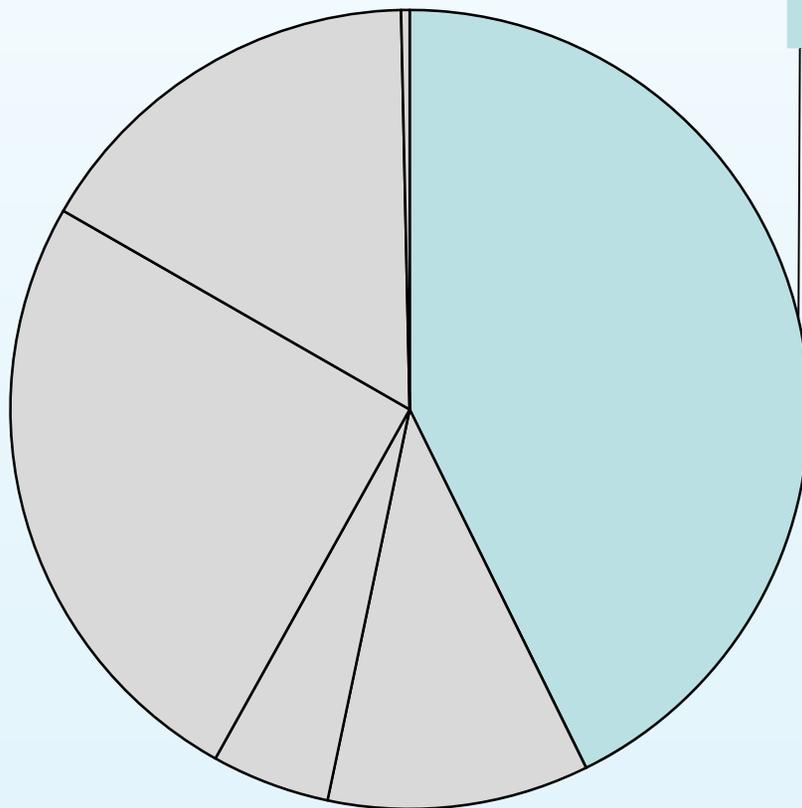
Definition: Pays for expansion projects through equitable assessments adopted by resolution.

Source: Assessments (Can be augmented with grants or other funding sources)

Note: Assessments are used as pledged revenues for borrowings



Operations & Maintenance (O&M) Fund



O & M
Fund

Percent of Budget: 42.7%

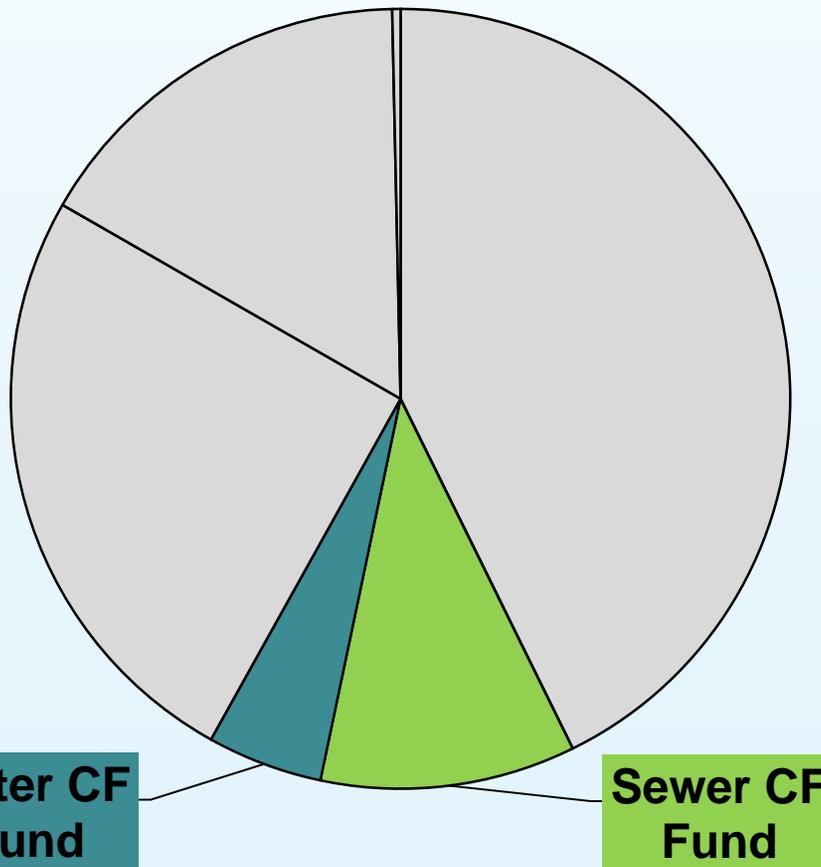
Amount: \$40,069,921

Definition: Cost of providing services and maintaining system and capacity.

Source: User fees including Base Facility Charge, Consumption or Usage Charge, a Customer Charge and payment of Accrued Guaranteed Revenue Fee by new users requesting service



Sewer Connection Fee and Water Connection Fee (CF) Funds



Percent of Budget:

Sewer 10.6%; Water 4.8%

Amount:

Sewer \$9,935,397

Water \$4,489,291

Definition: Used to pay for growth related capital costs. Also known as System Development Charges.

Source: New customers requesting utility services.



Connection Fee per ERC*

Water	
Plant Capacity	\$910
Transmission	\$380
Distribution	\$490
Total	\$1,780

Sewer	
Plant Capacity	\$1,100
Transmission	\$500
Collection	\$740
Total	\$2,350

* Equivalent Residential Connection (ERC) Based on rate resolution 4/1/2012



Debt Service Fund

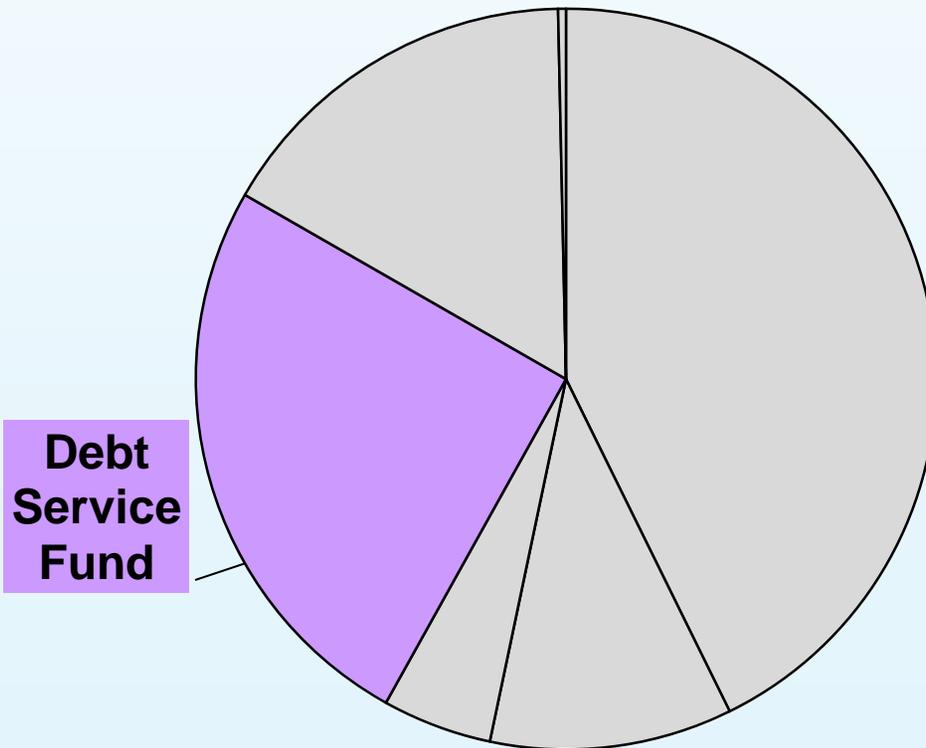
Percent of Budget: 25.2%

Amount: \$23,640,081

Definition: Fund pays all Utility bonds and debt.

Source: Transfer of Operations and Maintenance funds and MSBU Funds as needed to pay the annual debt and maintain debt reserves as required.

Final Bonds Maturity - 2024





Debt Retirement Fund

Principal Amount
remaining as
of 9/30/2012

Bond Total*

\$ 151,315,000

SRF Funding, Loans Total**

23,070,693

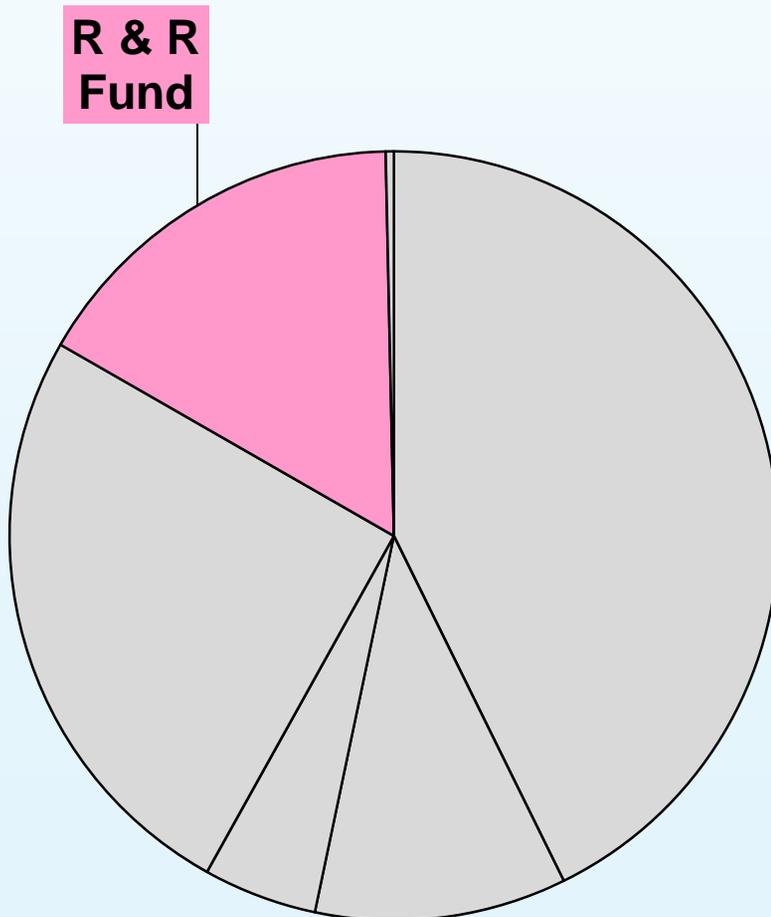
Total Debt \$ 174,385,693

* Purchase of GDU, Rotonda and Florida Water Service, Expansion of Burnt Store and 1995 Wastewater Expansion Engineering Design.

** MSBU water and sewer expansions, 1996 upgrade of East Port Facility, and Peace River REP internal loan payment.



Repair & Replacement (R&R) Fund



AKA - Refurbishment and Rehabilitation of Assets

Percent of Budget: 16.4%

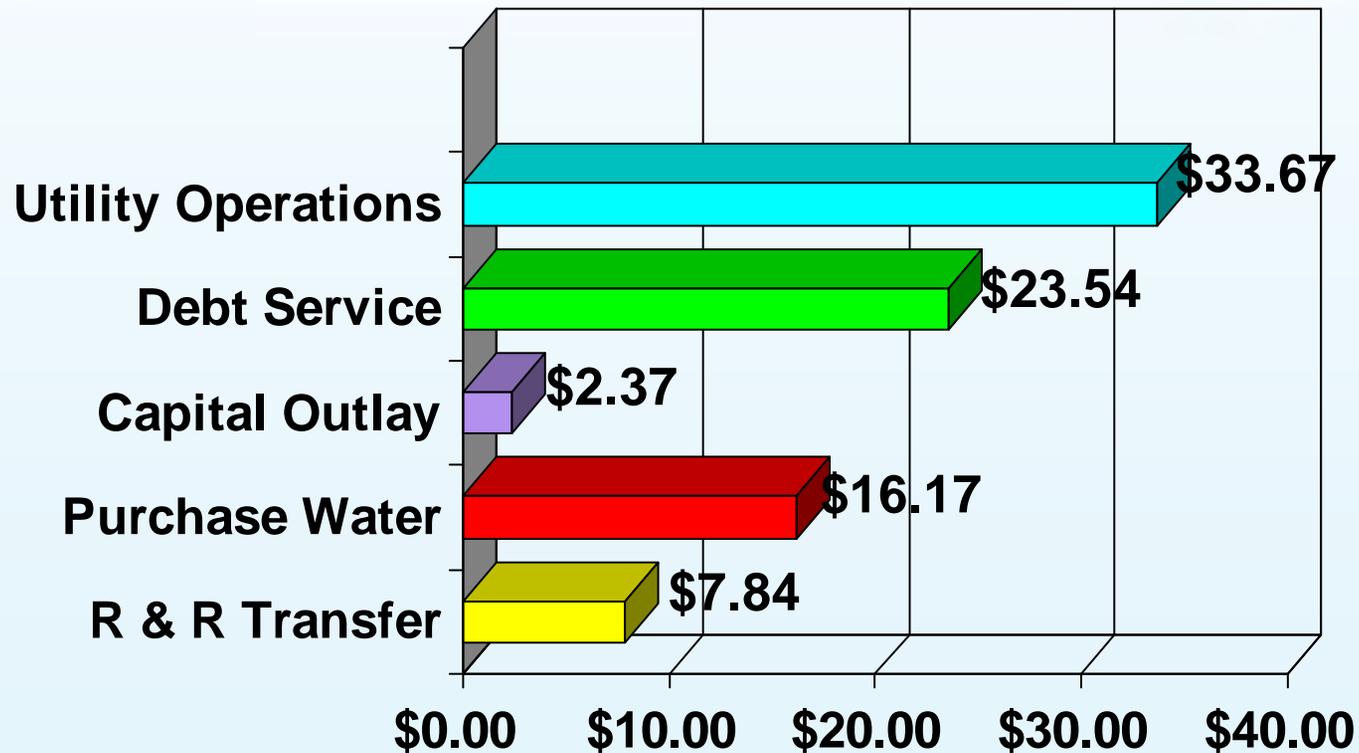
Amount: \$15,364,268

Definition: For renewal and replacement of infrastructure to maintain services and meet regulatory treatment standards

Source: Operations and Maintenance Funds



How an Average Payment of \$83.59 is used by the Utility



** Based on 4,000 gallons usage @ Rates Effective 10/1/2013
All utility bill payments are deposited initially into the O&M Fund.*



1997 – 2005 Rate Decrease For Water and Sewer Customers

- BOCC decreased water rates by 12% and sewer rates by 5%.
- No increases for inflation during this period.



Comparison of Monthly Charges for Combined Water and Wastewater Service For Single-Family Residential Customers Using 4,000 Monthly Gallons

