

# Water System Merger Feasibility Study



**FEASIBILITY STUDY FOR  
WATER SYSTEM MERGER**

**Carteret County, NC**



**December 2019**

**DAA Project Number: 18080125-010204**

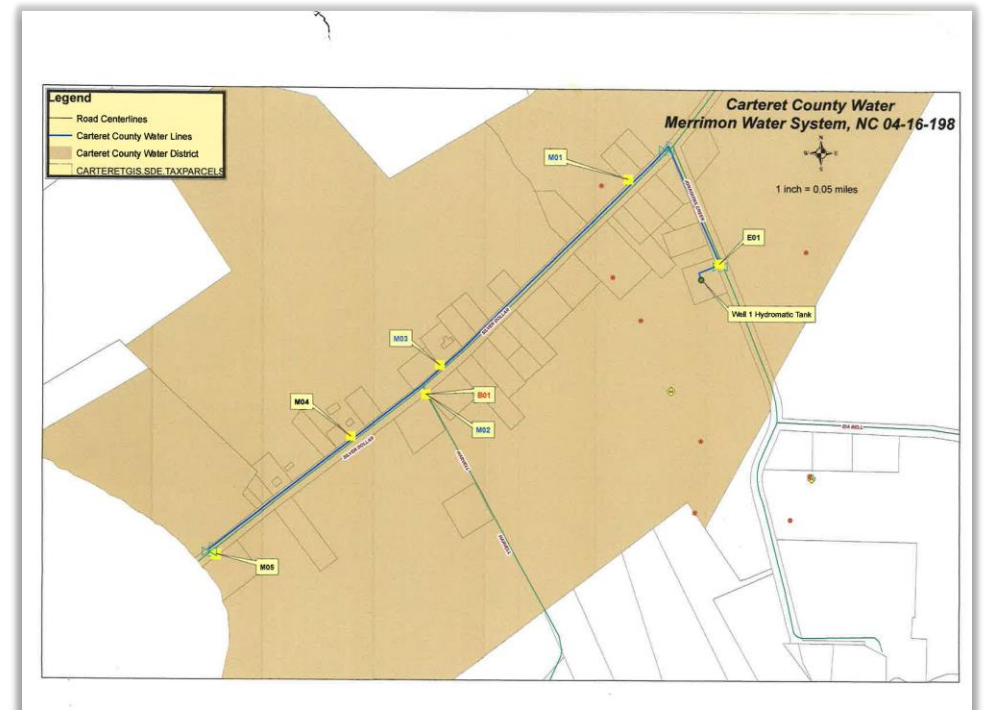
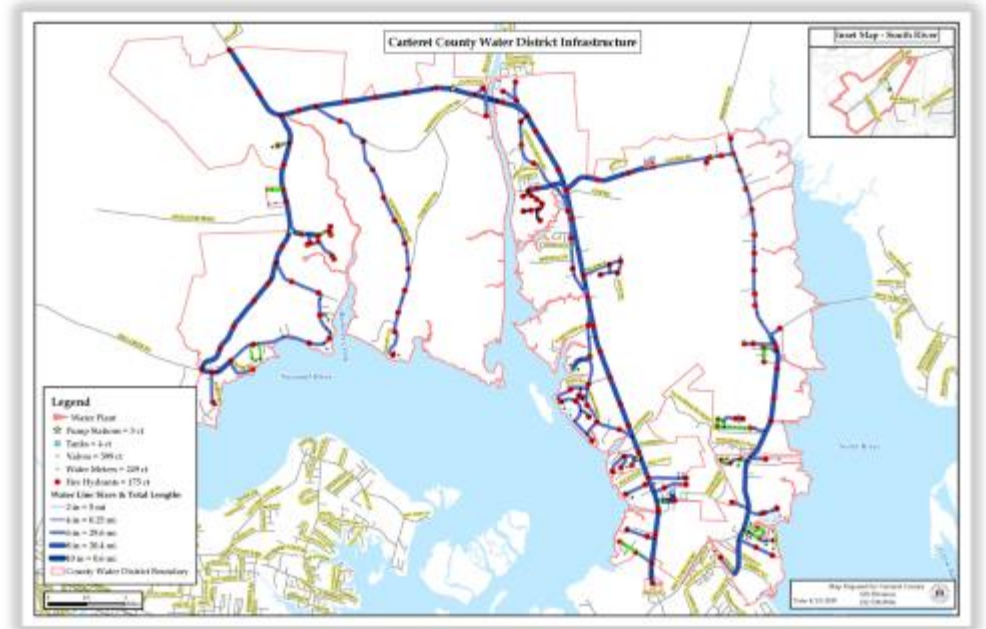
# **Water System Merger Feasibility Study**

- Commissioned by Carteret County
- Feasibility of Town owning & operating County's system

# Water System Merger Feasibility Study

## Two Systems

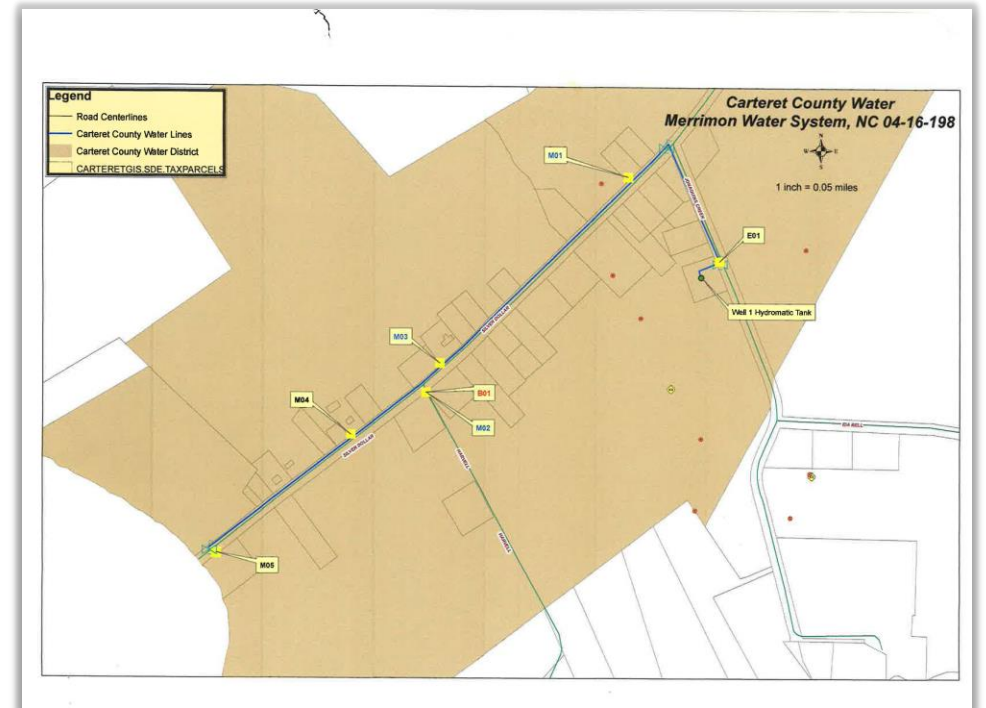
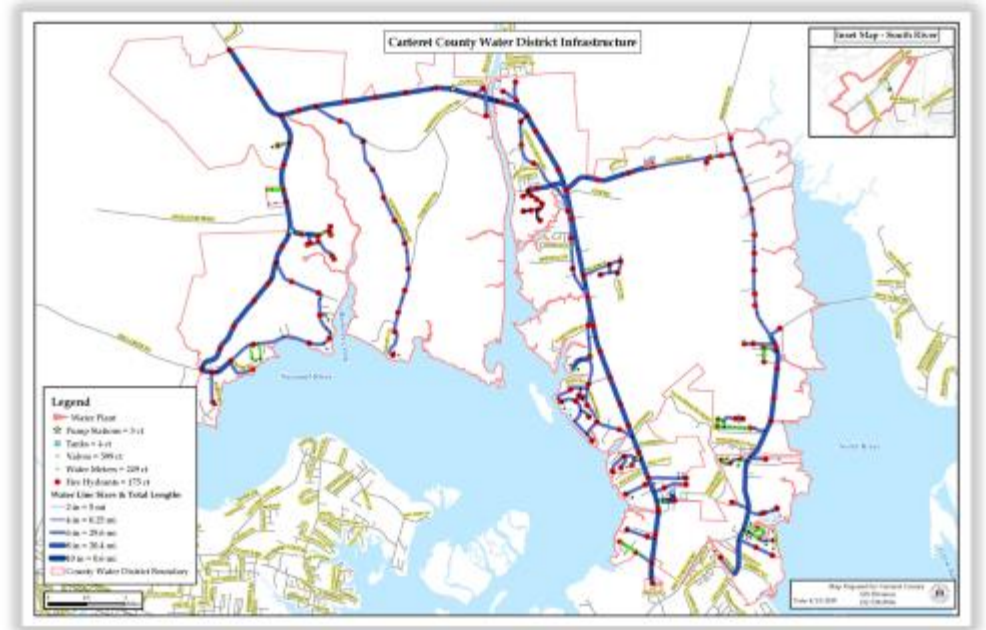
- One Water Plant
- Eight parcels
- Three wells
- Three Booster Pumps Stations
- Three Elevated Storage Tanks
- One Ground Storage Tank
- SCADA System



# Water System Merger Feasibility Study

## Two Systems

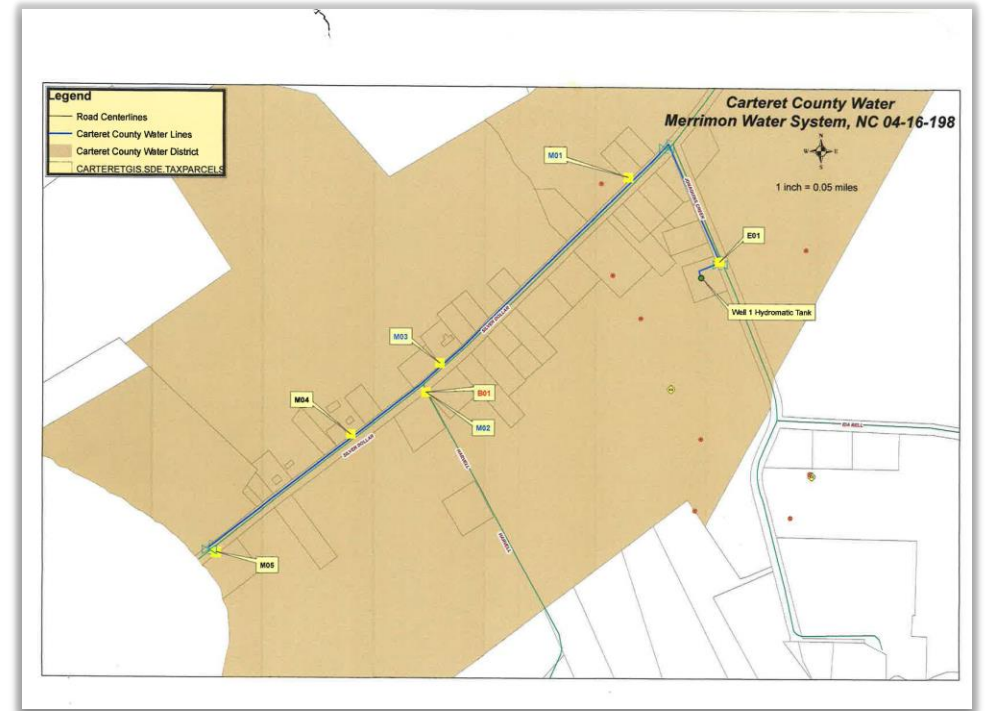
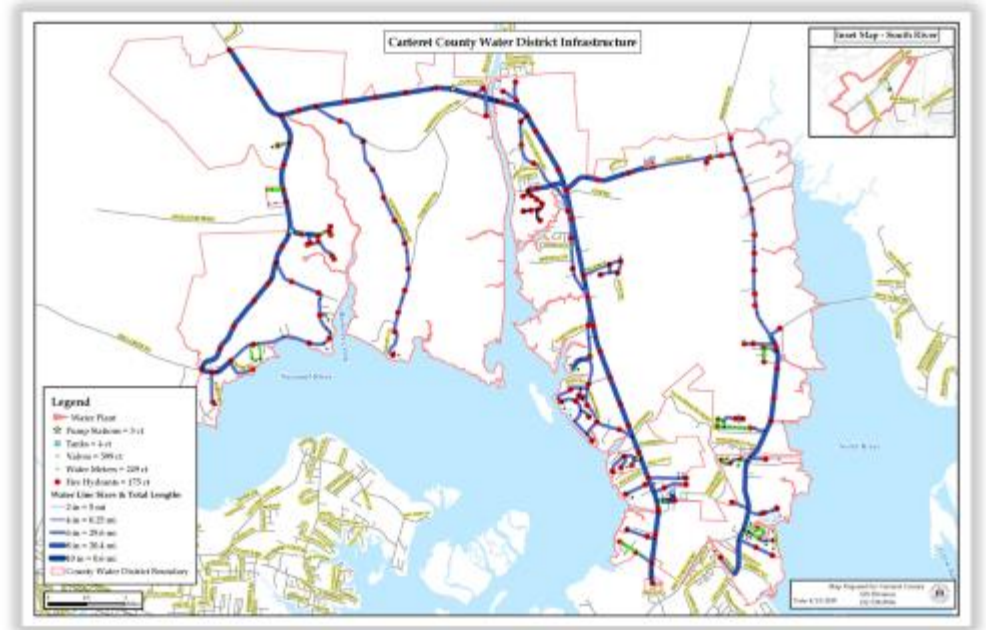
- 5 miles of 2-inch lines
- 0.25 miles of 4-inch lines
- 29.6 miles of 6-inch lines
- 0.6 miles of 10-inch lines
- 599 valves
- 1,206 water meters
- 175 fire hydrants





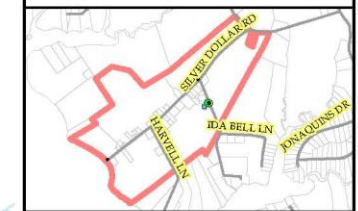
# Water System Merger Feasibility Study

- \$12,335,400 Estimated Value
- Three employees
- 1,206 County District Customers
- 25 - 30 Merrimon System Customers



# Carteret County Water District Infrastructure

## Inset Map - South River



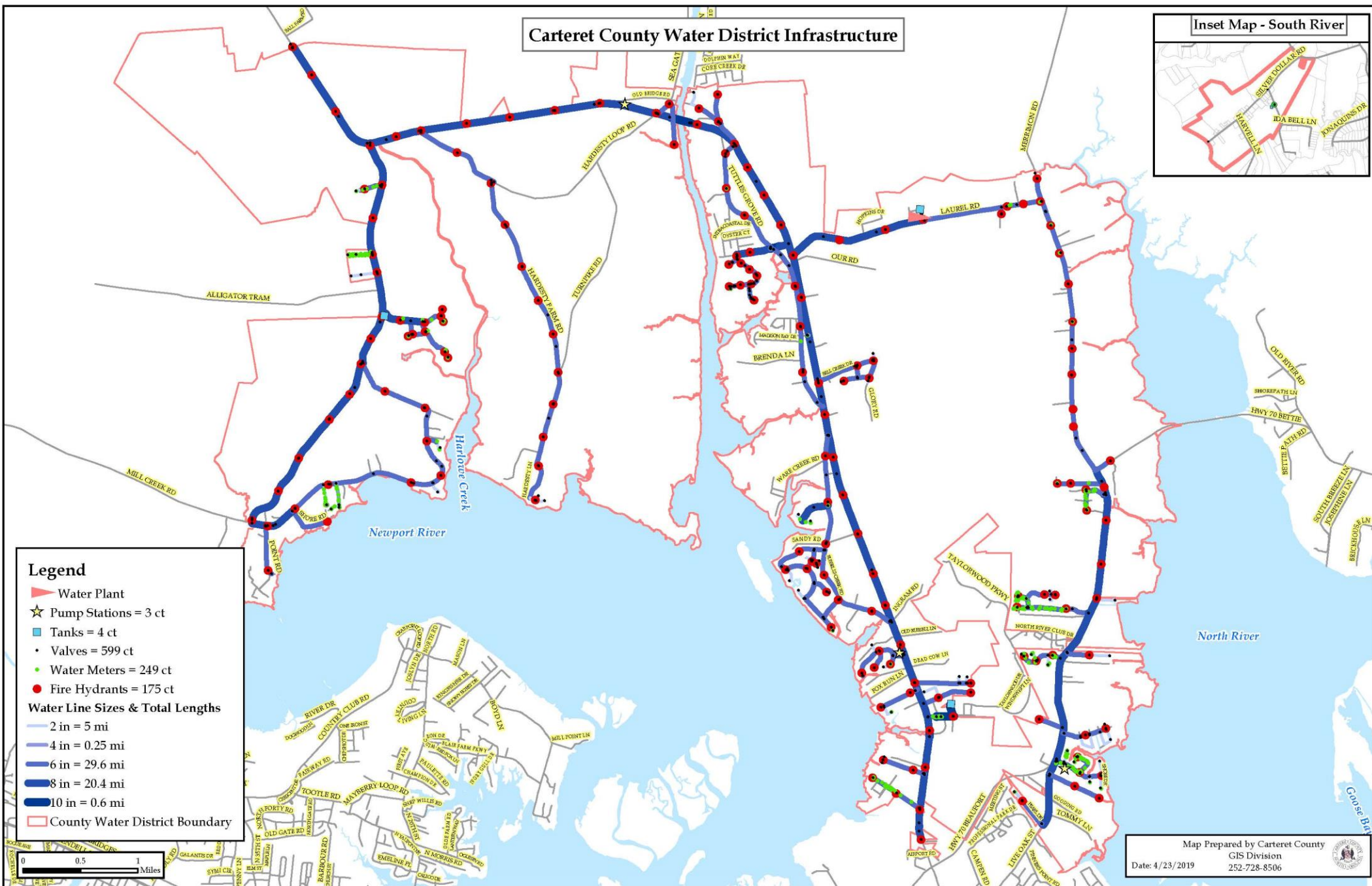
**Legend**

- Water Plant
- ★ Pump Stations = 3 ct
- Tanks = 4 ct
- Valves = 599 ct
- Water Meters = 249 ct
- Fire Hydrants = 175 ct

**Water Line Sizes & Total Lengths**

- 2 in = 5 mi
- 4 in = 0.25 mi
- 6 in = 29.6 mi
- 8 in = 20.4 mi
- 10 in = 0.6 mi

County Water District Boundary

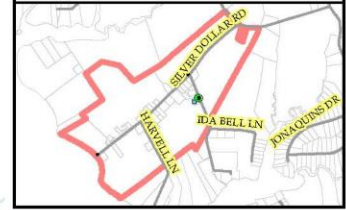




# Carteret County Water District Infrastructure

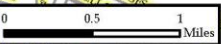
14± Miles

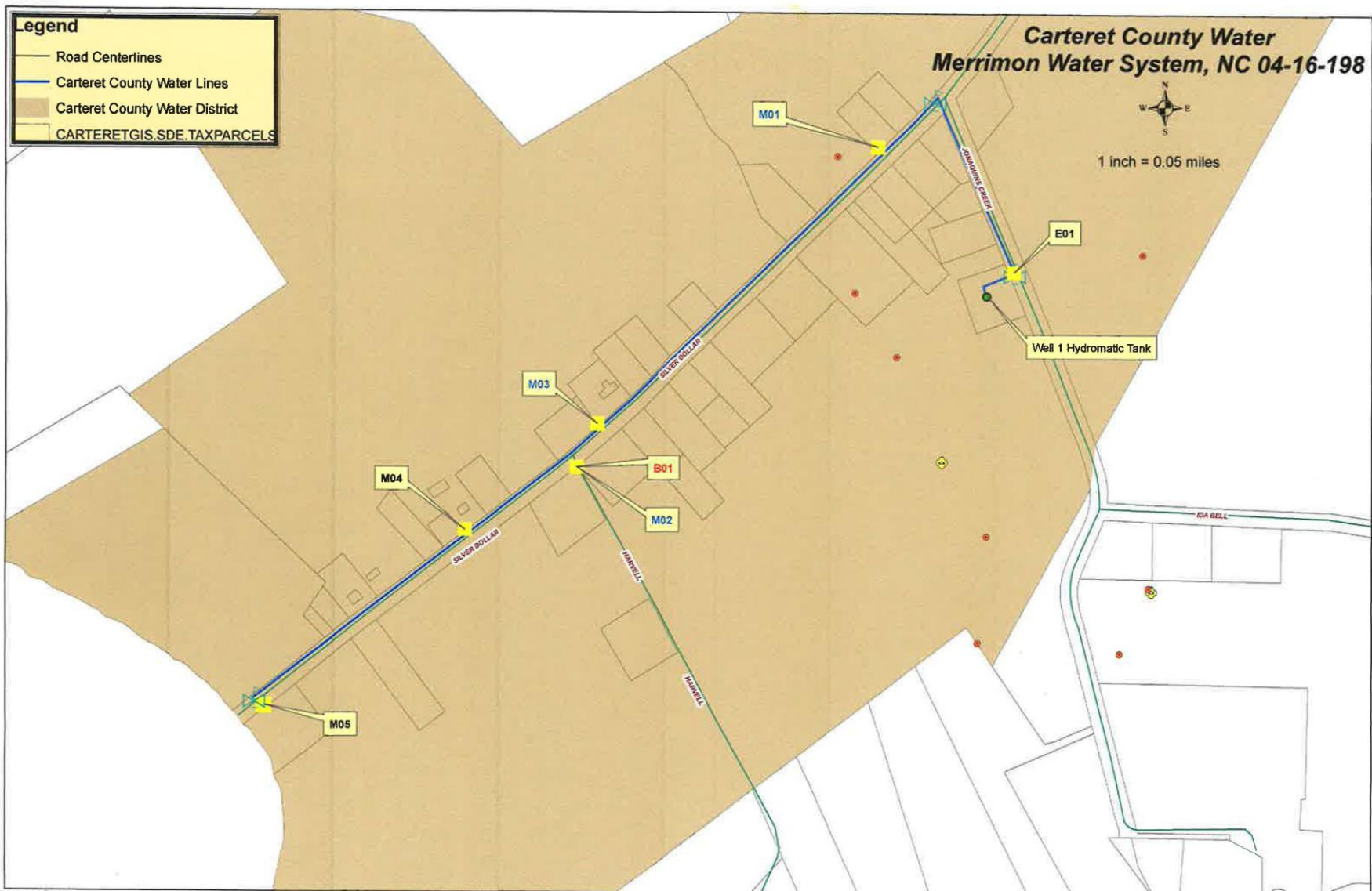
## Inset Map - South River



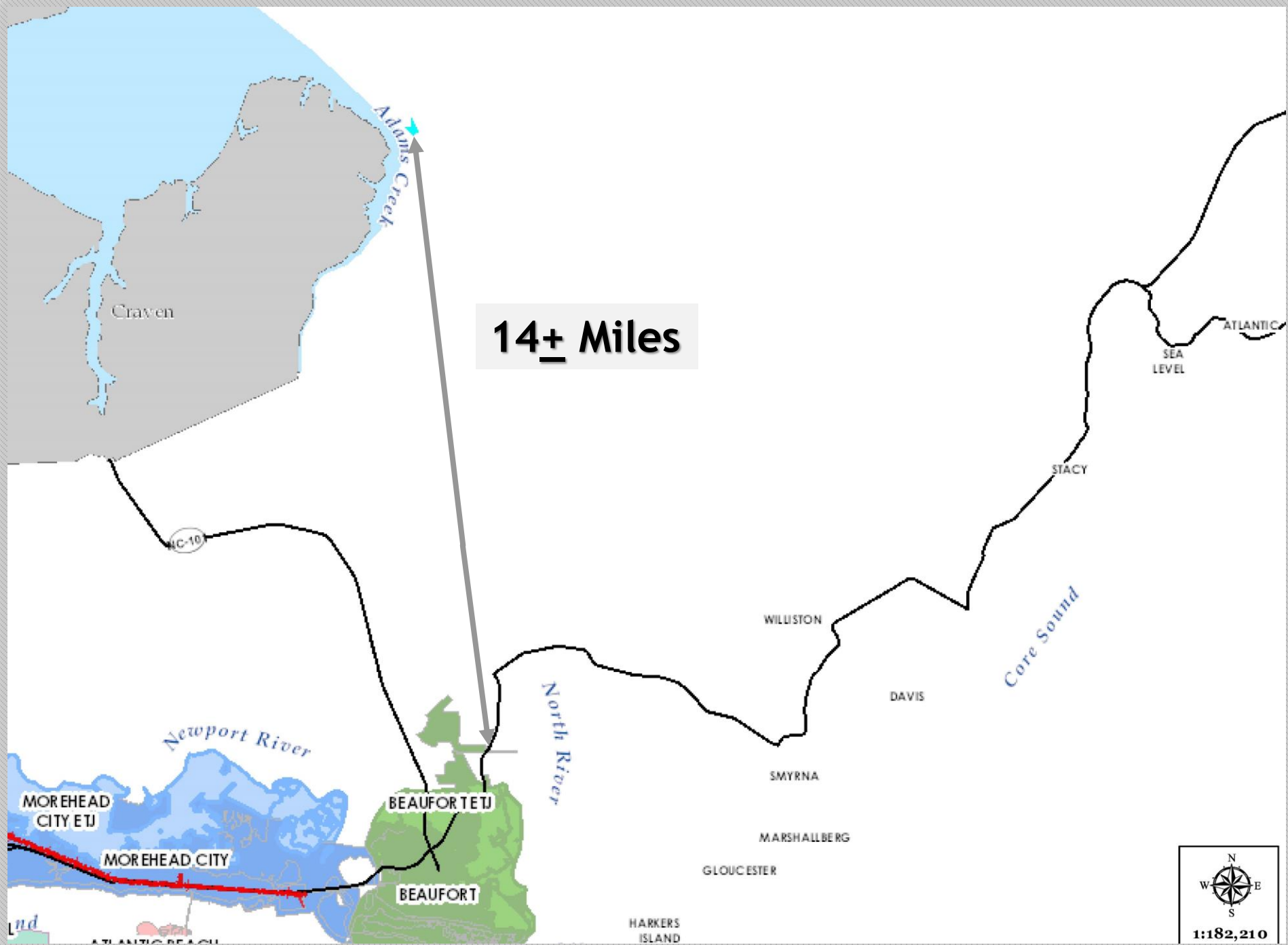
## Legend

- ▶ Water Plant
- ☆ Pump Stations = 3 ct
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- County Water District Boundary









# Water System Merger Feasibility Study

Year	Water System Revenue	Operating Expense	Debt Service	Capital Outlay	Net Income (Deficit)
2016	\$576,598	\$554,733	\$263,589	-	(\$242,724)
2017	\$584,344	\$668,215	\$259,277	-	(\$342,148)
2018	\$678,879	\$828,412	\$253,939	\$37,898	(\$441,370)
2019	\$711,732	\$726,384	\$249,600	\$25,500	(\$289,752)
Total	\$2,551,553	\$2,777,744	\$1,026,405	\$63,398	(\$1,315,994)

# Water System Merger Feasibility Study

Year	Water System Revenue	Operating Expense	Debt Service	Capital Outlay	Net Income (Deficit)	
2016	\$576,598	\$554,733	<del>\$263,589</del>	-	<del>(\$242,724)</del>	\$28,726
2017	\$584,344	\$668,215	<del>\$259,277</del>	-	<del>(\$342,148)</del>	(\$83,871)
2018	\$678,879	\$828,412	<del>\$253,939</del>	\$37,898	<del>(\$441,370)</del>	(\$187,431)
2019	\$711,732	\$726,384	<del>\$249,600</del>	\$25,500	<del>(\$289,752)</del>	(\$40,152)
Total	\$2,551,553	\$2,777,744	<del>\$1,026,405</del>	\$63,398	<del>(\$1,315,994)</del>	(\$289,589)



# Water System Merger Feasibility Study

- Special Tax District Supplement
  - Ad Valorem Tax @ \$0.055 per \$100 assessed value
  - Sales Tax Revenue
- Recent & Budgeted Revenue
  - FY2018 @ \$396,969
  - FY2019 @ \$403,000 (Budget)
  - FY2020 @ \$423,000 (Budget)

# Water System Merger Feasibility Study

## Projected FY2020 Budget

Item Description	Budget
System Revenue	\$710,400
System Expense	\$873,390
<i>Operating Loss</i>	(\$162,990)
Debt Service	\$245,880
<i>Net Loss</i>	(\$408,870)
Tax District Revenue Transfer	\$423,000
TOTAL	\$14,130

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# Water System Merger Feasibility Study

## “Key Advantages” for Beaufort (per Report)

- Town acquires \$12.3 million infrastructure
- Town operates “largely with” existing personnel *plus* 1½ additional staff
- Could spur growth (i.e. water + sewer availability)



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# Water System Merger Feasibility Study

## Report Recommendations for Carteret County

- Maintain special tax district until FY 2031
  - Retire debt
  - Remaining funds “may” be used for capital improvements participation
- Transfer system(s) to Town
- Maintain right to request system upgrades
  - Paid by County “for a negotiated number of years”

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# Water System Merger Feasibility Study

## Other Recommendations

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- Town adopts readiness to serve charge
  - Equal to current out-of-town charge
- Town adopts water usage rates
  - Equal to in-Town rates
  - Keeps water rates below current rates
  - Reduces revenues

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 **Draper Aden Associates**  
Engineering • Surveying • Environmental Services

# Water System Merger Feasibility Study

## Town Staff Assessment

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- Unprofitable for the foreseeable future
- Areal extent far greater than Potential Town growth
- Question the reduction from 3 current employees to 1½
- Addition of two County system wells could be beneficial
  - No well data provided



Questions?

Comments?