

Community and Partner Agency Update

April 23, 2024

Swansboro Town Board Update





WHO WE ARE

ONWASA is a government entity that provides water and/or sewer services to the unincorporated areas of Onslow County, which includes areas outside of the City limits of Jacksonville, and all the towns of Holly Ridge, North Topsail Beach, Richlands, Swansboro, and a portion of Surf City. ONWASA also provides bulk water services to Pender County and local military bases.

Onslow Water & Sewer Authority (ONWASA) was incorporated on July 31, 2000, after the governing body for each of the member governments passed a Resolution including Articles of Incorporation.

MEMBER GOVERNMENTS

County of Onslow
Town of Holly Ridge
City of Jacksonville
Town of Richlands
Town of Swansboro
Town of North Topsail Beach

O: 910.937.7532

F: 910.347.0793

228 Georgetown Rd
Jacksonville, NC 28540



BOARD OF DIRECTORS

The ONWASA Board of Directors consist of eight members, two appointed by the Board of Commissioners for the County of Onslow, two appointed by the City Council of the City of Jacksonville, one each appointed by the Board of Commissioners of the Town of Swansboro, the Board of Aldermen of the Town of Richlands, the Board of Aldermen of the Town of North Topsail Beach, and the Town Council of the Town of Holly Ridge.

Current members of the ONWASA Board include:

Mr. Royce Bennett, Chairman (County)

Mr. Paul Conner, Vice Chairman (Richlands)

Mr. Rick Grant, Secretary/Treasurer (North Topsail Beach)

Mr. John Davis (Swansboro)

Mr. Jerry Bittner (Jacksonville)

Mr. Timothy Foster (County)

Mr. Robert Warden (Jacksonville)

Mr. Greg Hines (Holly Ridge)



ONWASA BY THE NUMBERS

4,270,500,000 (11.7 MGD*)	Annual Drinking Water Capacity in Gallons **
3,751,835,863 (10.2 MGD*)	Gallons of Water Pumped Annually
2,251,320,000 (6.17 MGD*)	Annual Wastewater Treatment Capacity in Gallons**
605,388,599 (1.66 MGD*)	Gallons of Wastewater Treated Annually
16,050,000	Gallons of Water Stored in Clear Wells and Tanks
14,506,640	Gallons of Water Stored in Underground Pipes
1,005,463	Miles Driven Annually
683,543	Meter Readings Annually
245,184	Main Office - Phone Calls Handled Annually
147,791	Estimated Number of Individual Consumers
68,783	Lab Analysis' Processed Annually
67,954	Work and Service Orders Processed Annually
57,806	Number of Water Accounts
14,543	Number of Sewer Accounts
1,244	Miles of Water Mains
445	Square Miles of Service Area
255	Miles of Wastewater Mains
247	Facilities to Maintain
172	Full Time Positions

* MGD = Million Gallons per Day

**All Plants Combined

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Service Areas and Facilities



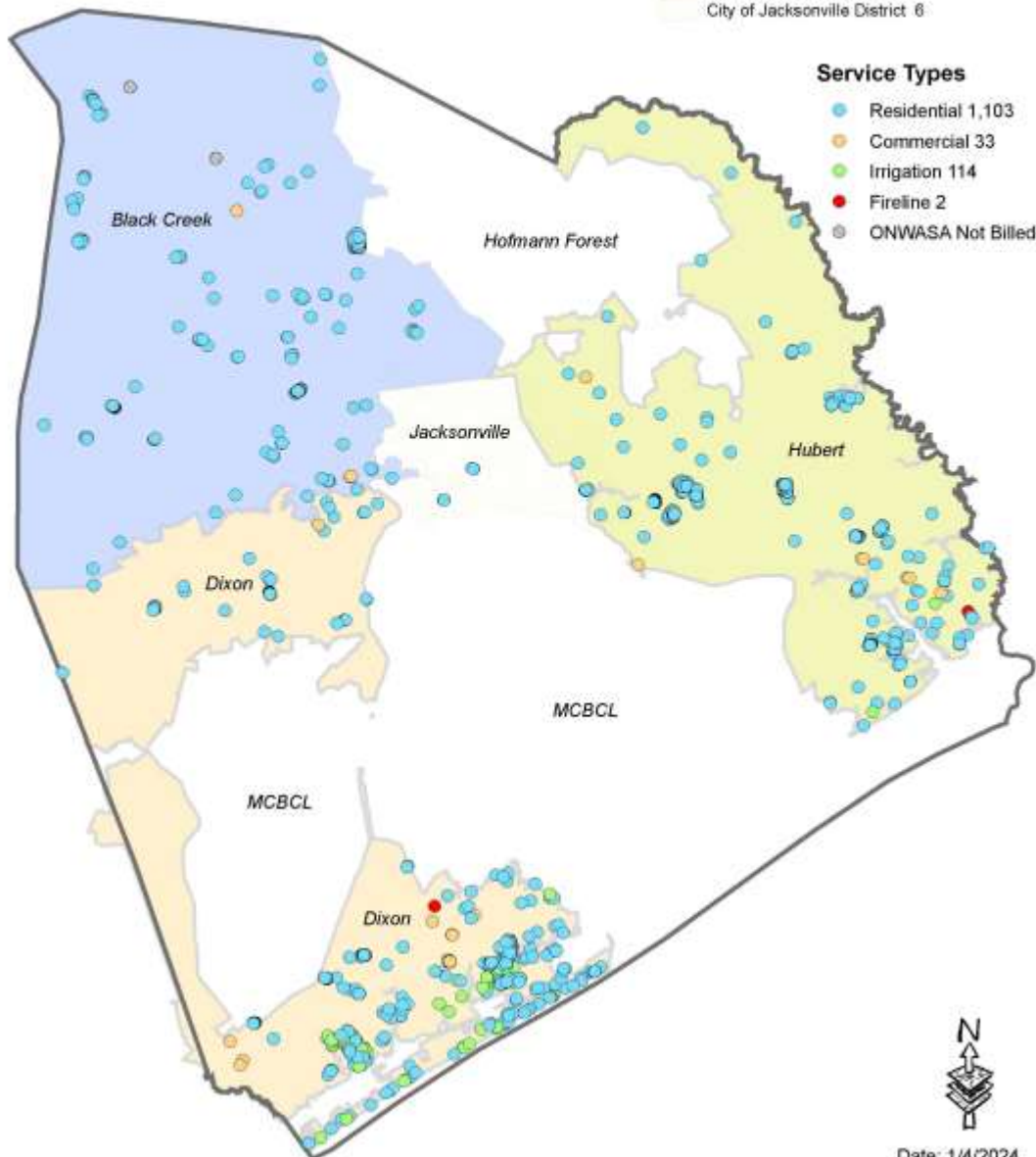
Yearly Meter Installs 2023

Total Installs by Service District

- Black Creek Service District 203
- Hubert Service District 410
- Dixon Service District 635
- City of Jacksonville District 6

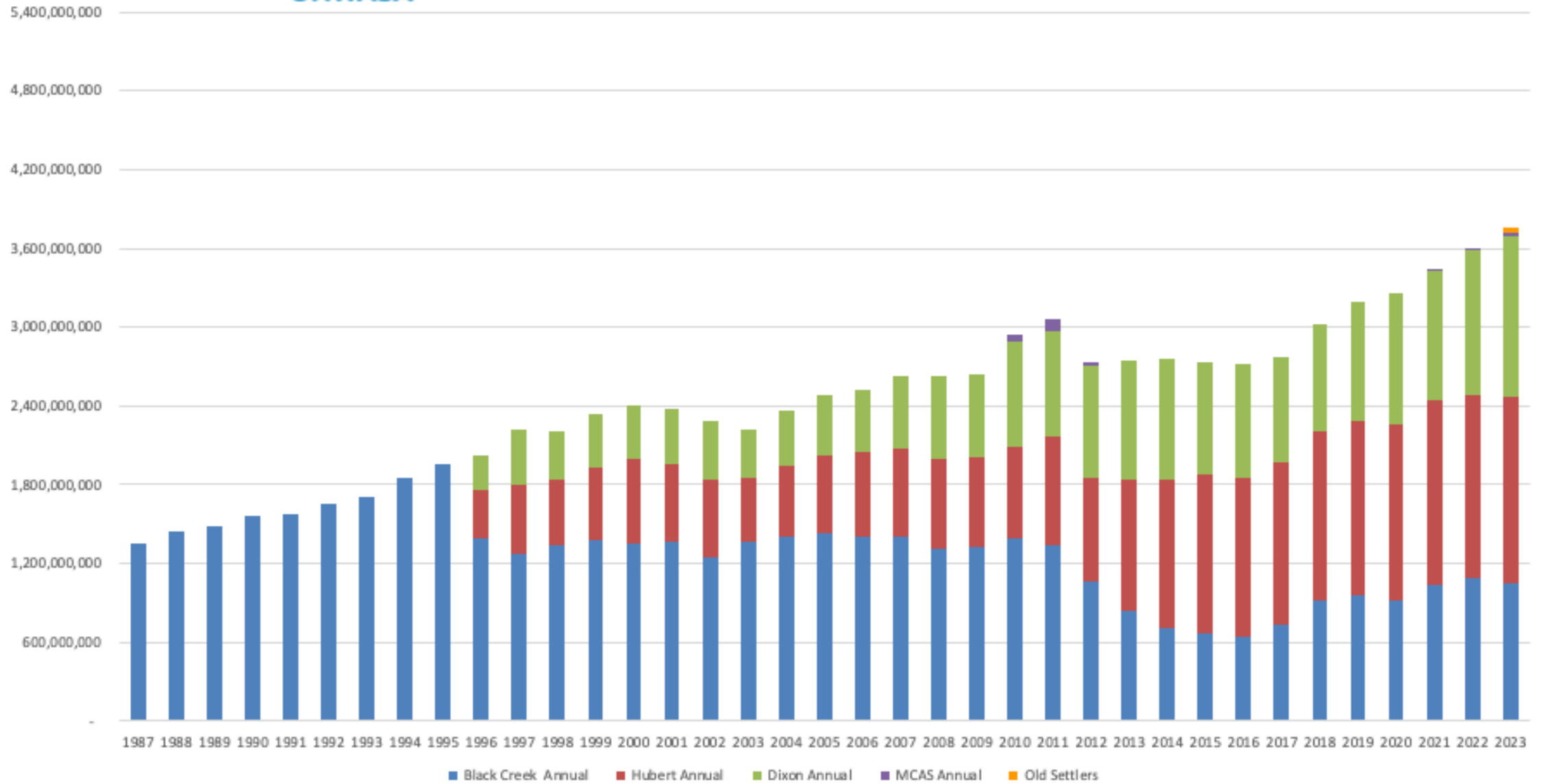
Service Types

- Residential 1,103
- Commercial 33
- Irrigation 114
- Fireline 2
- ONWASA Not Billed 2





ONWASA Water Production By Source 1987-2023





Monthly Comparison 2013-2023

444,000,000

400,000,000

100% Permit

90% Permit

350,000,000

300,000,000

250,000,000

200,000,000

150,000,000

100,000,000

50,000,000

0

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

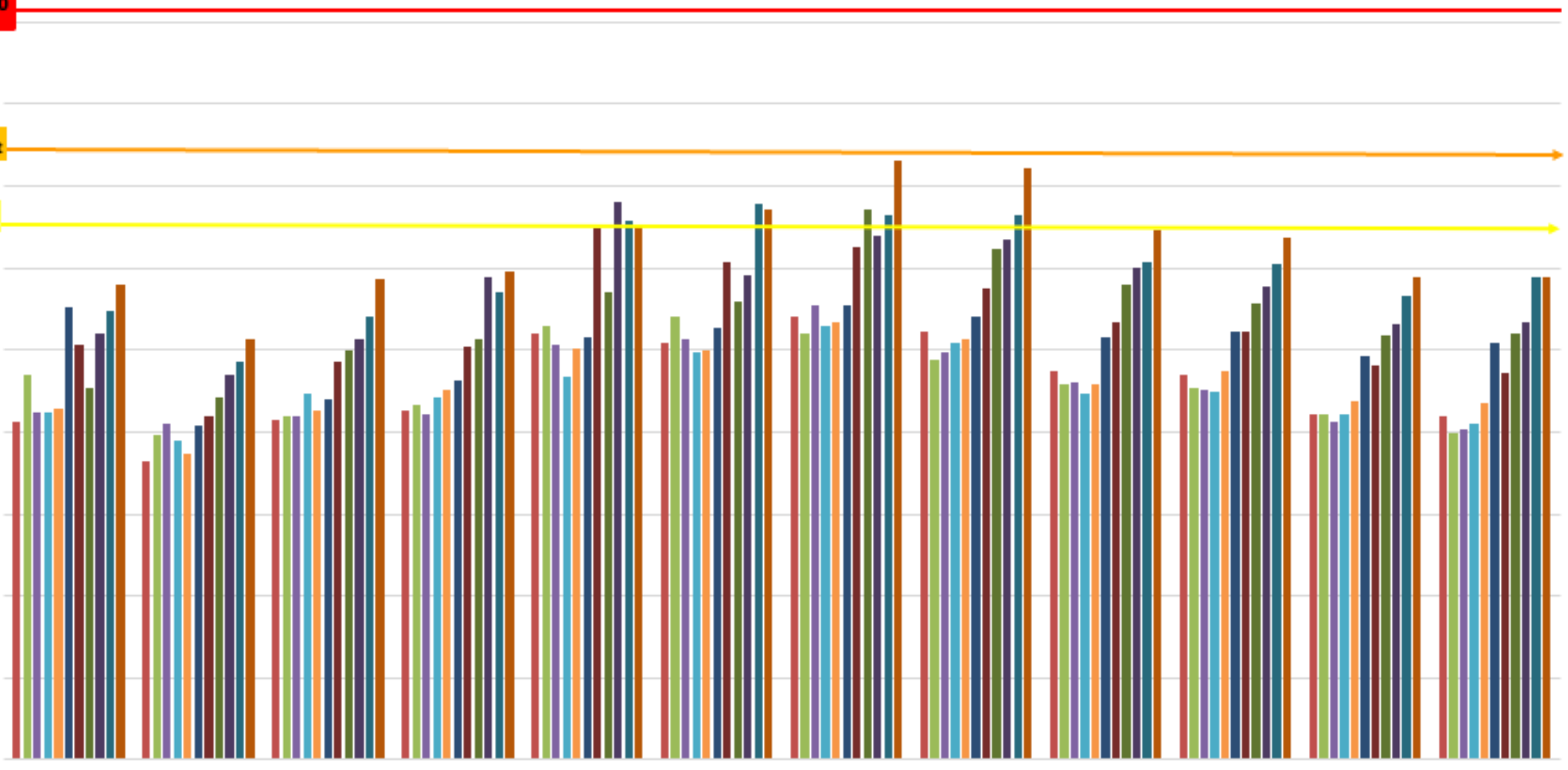
Sep

Oct

Nov

Dec

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023



**ONWASA operates 35 wells
across Onslow County**

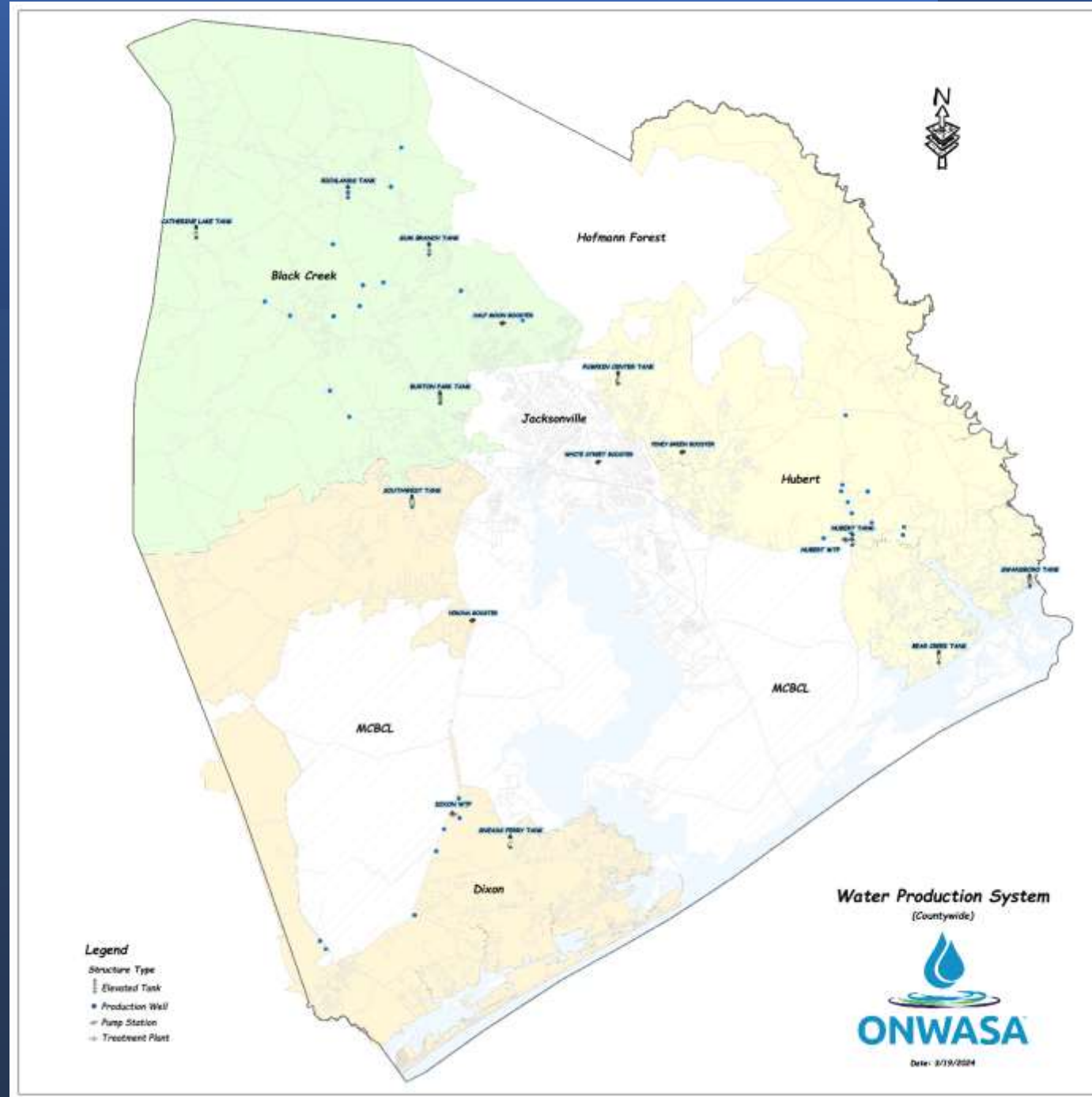
**10 Black Creek Aquifer wells
in and around Richlands**

1 Pee Dee Aquifer

**14 Castle Hayne Aquifer
wells for the Hubert Plant**

**10 Castle Hayne Aquifer
wells for the Dixon Plant**

**2 more Castle Hayne wells
and 1 more Black Creek Well
are in development stages**



Black Creek Well Field (No Plant treatment required)

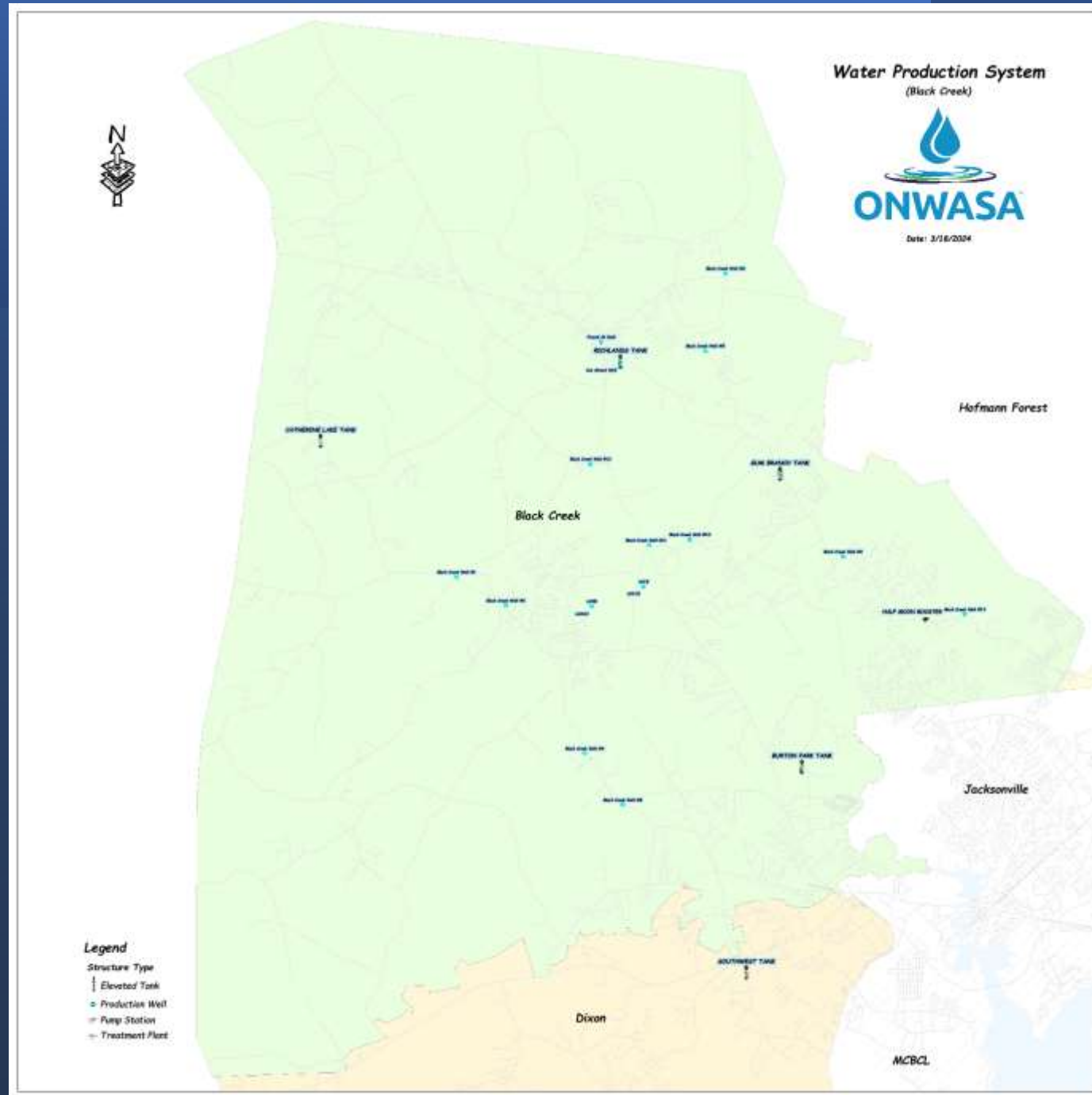
10 Black Creek Aquifer Wells

These are currently limited to 25% pumping capacity as set by the State in the Central Coastal Plain Capacity Use Area rule.

We are seeking state approval to go back to 50% or higher. (We have been pumping them at 50% due to our banked capacity credits with the State. We will use those up in 7 years.)

Currently these represent 1.44 MGD Capacity of our total 11.7 MGD system.

1 Pee Dee Aquifer Well that represents 0.298 MGD



14 Castle Hayne Aquifer wells for the Hubert Plant

This represents 6 MGD of our total 11.7 MGD Capacity.

Through our Piney Green and Half Moon Booster stations we are able to move Hubert Water towards Richlands to reduce the Black Creek usage.

The Hubert Plant can be seen from Hwy 24 but is on Hubert Boulevard.

We have a new 18" water line being designed to help move Hubert Water towards Piney Green.



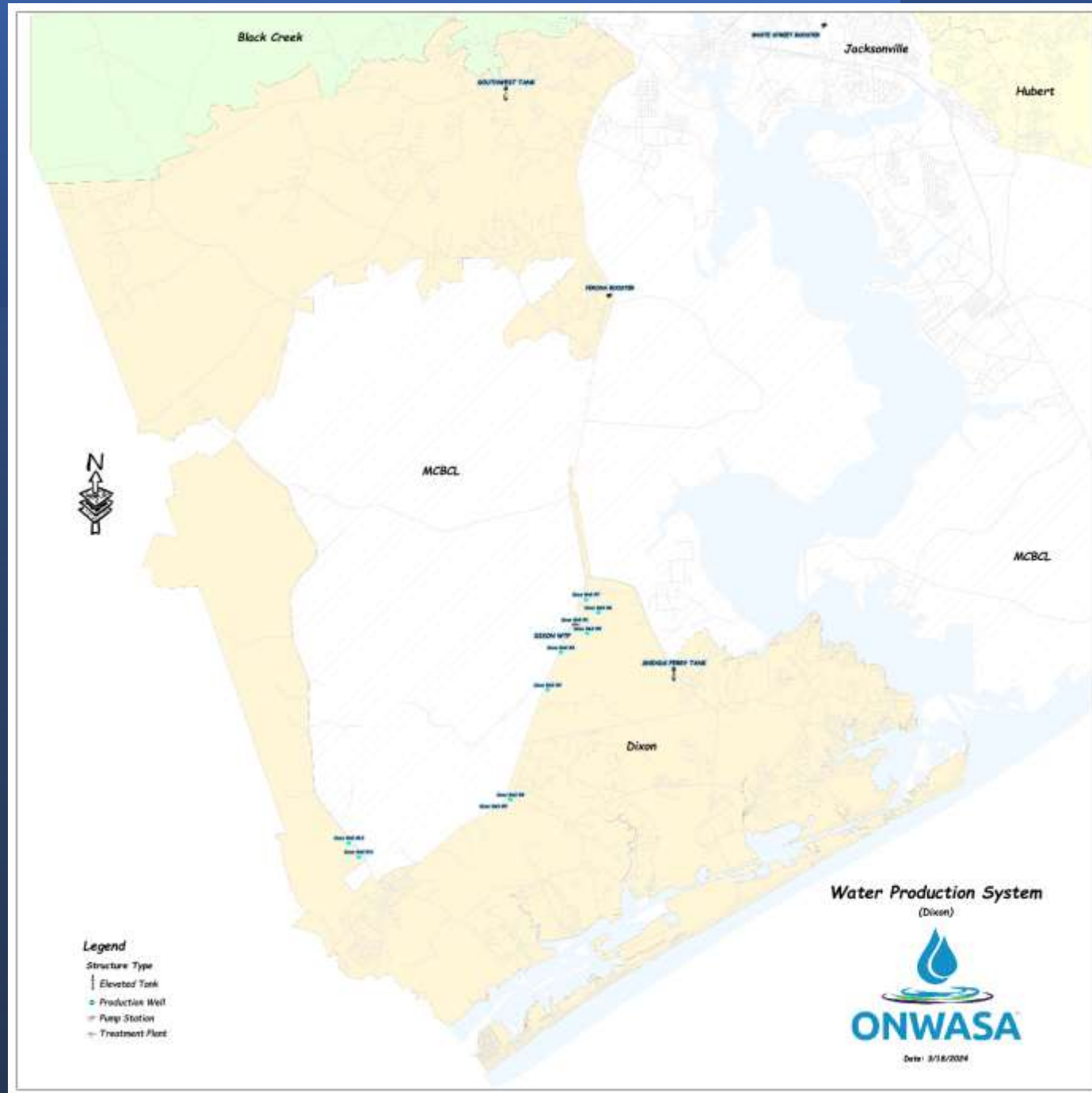
Dixon Well Field and Plant

10 Castle Hayne Aquifer wells for the Dixon Plant

This represents 4 MGD of capacity. We are actively working to expand this plant to 6 MGD to match Hubert.

We do have the ability to run a portion of this capacity through a reverse osmosis treatment membrane system. We can also send this water towards Southwest through our Verona Booster station to cut back on the Black Creek Wells.

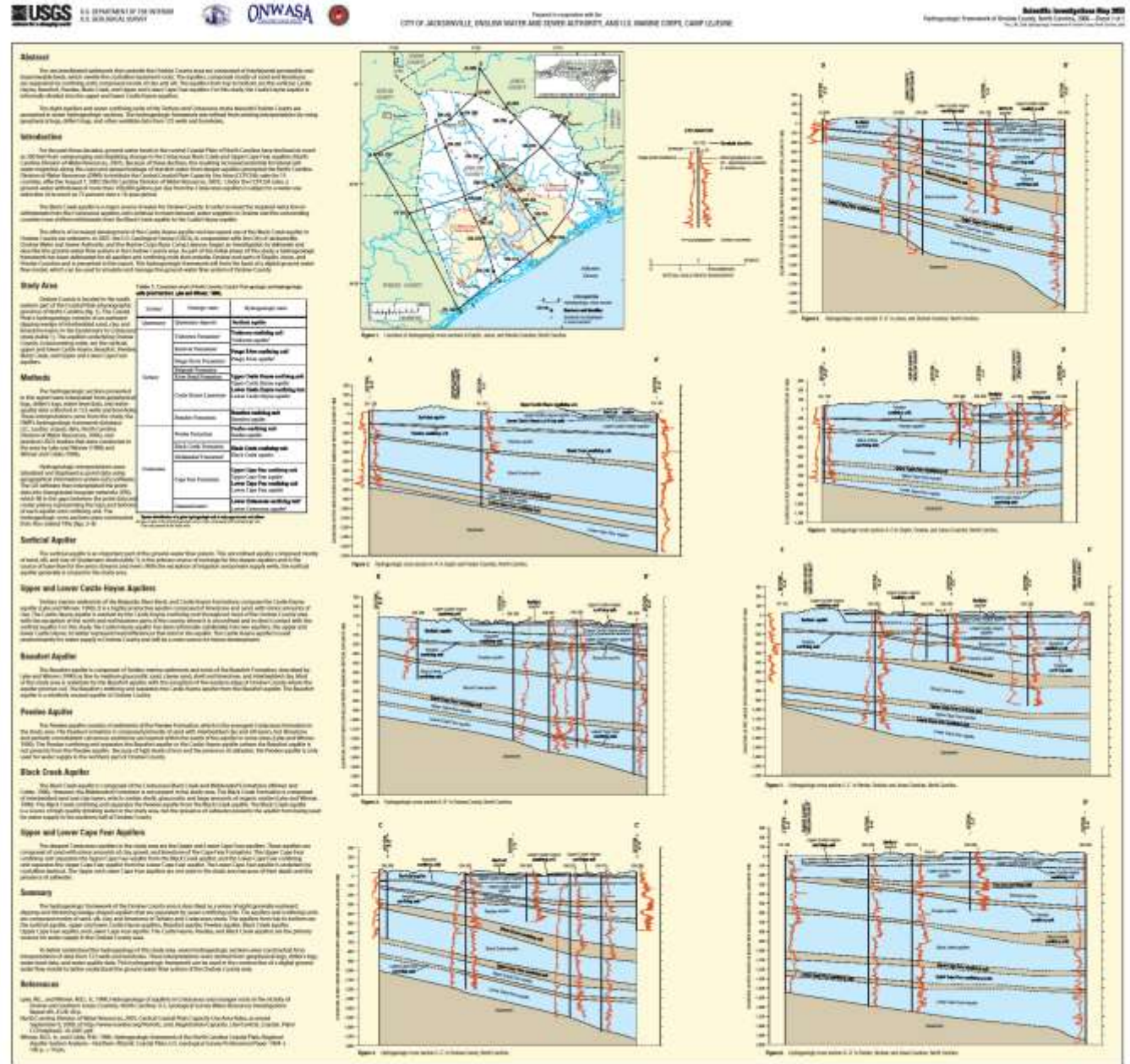
2 more Castle Hayne wells and 1 more Black Creek Well are in development stages.



Source: <https://pubs.usgs.gov/sim/3055/>

Hydrogeologic Framework of Onslow County, North Carolina, 2008

Joint project with the United States Geological Survey (USGS) and ONWASA, City of Jacksonville and MCBCL.



Hydrogeologic Framework of Onslow County, North Carolina, 2008

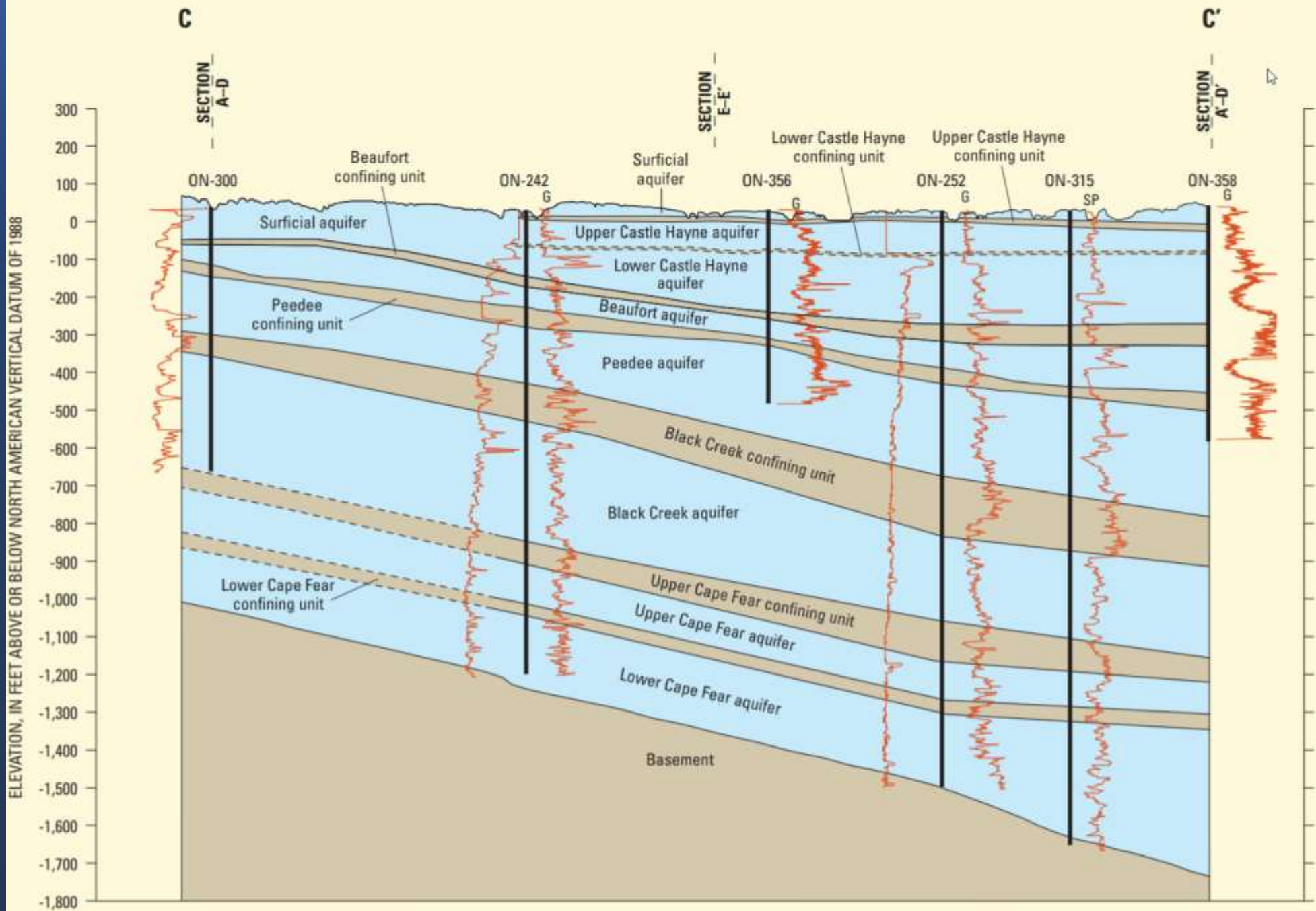


Figure 4. Hydrogeologic cross section C-C' in Onslow County, North Carolina.

April is National Safe Digging Month

BURIED
TELEPHONE
CABLE

BURIED
SEWER

BURIED
GAS
LINE

BURIED
WATER

BURIED
ELECTRIC
CABLE



Onslow County Locate Ticket Stats: (Jan-March) YTD

2023 ---- 8551 Tickets

2024 ---- 8676 Tickets (1.5% increase)

That is an average of 140 tickets per day.

Onslow County is 4th in total locate request called in for the 35 Counties east of I-95:

Top 4 counties are as follows

Brunswick

New Hanover

Cumberland

Onslow

ONWASA has a dedicated crew to just complete locate request (Crew of 4)



Utility Markings

Facility members will mark their lines in either water soluble paint or flags. Please stay at least 24 inches outside the exterior sides of any markings. If you must dig within the 24 inches please hand dig with caution.





CAPITAL IMPROVEMENT PLAN

O: 910.937.7532

F: 910.347.0793

228 Georgetown Rd
Jacksonville, NC 28540

We have over 25 Capital Projects in various stages of development over a multi-year plan.

The cost estimates for these projects is over **\$296M** in the next 5-10 years. These cost are funded through our rate and fee schedule and system development fees.

We do not receive any local tax dollars to operate or fund capital projects. We do occasionally seek and receive grants for specific projects.

No.	Project Description	Type	Service Area	YEARS 1-5 CAPITAL IMPROVEMENT NEEDS					YEARS 6 - 10	Project Total
				FY23	FY24	FY25	FY26	FY27	FY28-32	
	Buildings/Misc. Operational Projects									
CIP-002A	Laboratory Addition (C only)	R	Central Office	300,000						300,000
CIP-002B	Parts and Equipment Warehouse (C only)	R	Central Office	50,000						50,000
CIP-035	Water & Sewer Operational Improvements (D+C)	R	Various	600,000	1,500,000		1,500,000		4,500,000	8,100,000
N/A	Disaster Recovery Response Contracts (C only)	R	Various		1,000,000		1,000,000		3,000,000	5,000,000
CIP-001	Building Roof Replacements (D+C)	R	Various		\$357,157	\$250,000	\$250,000	\$250,000	\$500,000	\$1,607,157
CIP-011	Emergency Power Systems Upgrades (D+C)	R	Various		982,911	1,482,911	500,000	500,000	1,500,000	4,965,822
	WATER SYSTEM									
	Raw Water and Monitoring Wells									
CIP-010	ORWRG Aquifer Study Monitoring Wells (D+C)	R	Various			175,000		150,000	300,000	625,000
	Union Chapel WTP									
CIP-025A	Union Chapel WTP Feasibility and New Well Sites (D+C)	E	Southwest	206,815	75,000	1,000,000	1,500,000	3,000,000	11,250,000	17,031,815
CIP-025B	Union Chapel Water Treatment Facility (D+C)	E	Southwest					36,000,000	96,000,000	132,000,000
	Water Distribution System - Renovation									
CIP-032	Topsail Island Booster Pumping Station (D+C)	R	Stump Sound	50,000	1,683,180					1,733,180
CIP-017	Highway 24 Regional Trunk Water Main (D+C)	R	Swansboro	50,000	1,500,000	10,250,000	10,250,000			22,050,000
CIP-003	Water Main Interconnections, Phases 3 - 7 (D+C)	R	Various		300,000		500,000		1,500,000	2,300,000
CIP-037	Water Main Aerial Crossing Replacements, Phase 1 (D+C)	R	Various			1,238,741				1,238,741
CIP-004	SW Service Area Upgrades, Project 2 - Hwy 17 Trunk Main (D+C)	R	Southwest			250,000	500,000	5,100,000	16,200,000	22,050,000
CIP-018	Queens Creek Road Water Main Upgrades (D+C)	R	Swansboro						5,400,000	5,400,000
CIP-019	Rocky Run Road Water Main Upgrades (D+C)	R	White Oak						6,500,000	6,500,000
	WASTEWATER SYSTEM									
	Northwest Regional Water Reclamation Facility									
N/A	Hurricane Florence Recovery (C only)	R	Richlands		1,963,807					1,963,807
	Southeast Regional WWTPs									
CIP-005	Summerhouse Interim Capacity Improvements (D+C)	R	Stump Sound	8,200	3,082,900					3,091,100
CIP-028	Capacity Improvements (Project To Be Determined)	E	Stump Sound							0
	Swansboro WWTP									
CIP-006A	Hwy 24 Utility Improvements - Wastewater Force Main (D+C)	E	Swansboro	300,000	8,000,000	18,000,000	4,130,000			30,430,000

No.	Project Description	Type	Service Area	YEARS 1-5 CAPITAL IMPROVEMENT NEEDS					YEARS 6 - 10	Project Total
				FY23	FY24	FY25	FY26	FY27	FY28-32	
	<i>WASTEWATER SYSTEM (cont.)</i>									
	Wastewater Collection System - Renovation									
CIP-007	Heather Loop Road Gravity Sewer Improvements (C only)	R	White Oak	226,104						226,104
CIP-016	Pumping Station Assessments/Rehabilitation (D+C)	R	Various	132,200	500,000		1,000,000		3,000,000	4,632,200
CIP-033	Hargett Street & Shore Drive Pump Stations Rehabilitation (D+C)	R	Various		500,000	500,000				1,000,000
CIP-034	Piney Green Sewer Phase 2 - Hickory Grove Closure (C only)	R	White Oak		227,927					227,927
CIP-036	Mount Pleasant Road Pump Station Relocation (D+C)	R	Swansboro		178,030	1,000,000				1,178,030
	Wastewater Collection System - Expansion									
CIP-008	NW Plant - Kenwood/Bishops Ridge Service Extension (D+C)	E	Southwest						5,800,000	5,800,000
CIP-020	NW Plant - Liberty Park Road Service Extension (D+C)	E	Southwest						2,700,000	2,700,000
CIP-021	NW Plant - Hill Farms Service Extension (D+C)	E	Richlands						4,600,000	4,600,000
CIP-022	NW Plant - Denise Dr/Greystone Dr Service Extension (D+C)	E	Southwest						4,000,000	4,000,000
CIP-029	NW Plant - Plum Point Sewer Extension (D+C)	E	Southwest						4,400,000	4,400,000
CIP-030	Piney Green FM - Birchwood Park Service Extension (D+C)	E	White Oak						1,400,000	1,400,000
	Totals			\$1,923,319	\$21,850,912	\$34,146,652	\$21,130,000	\$45,000,000	\$172,550,000	\$296,600,883
							Total: Years 1-5	\$124,050,883		

Notes:

Chart does not reflect active projects funded in previous budget years.

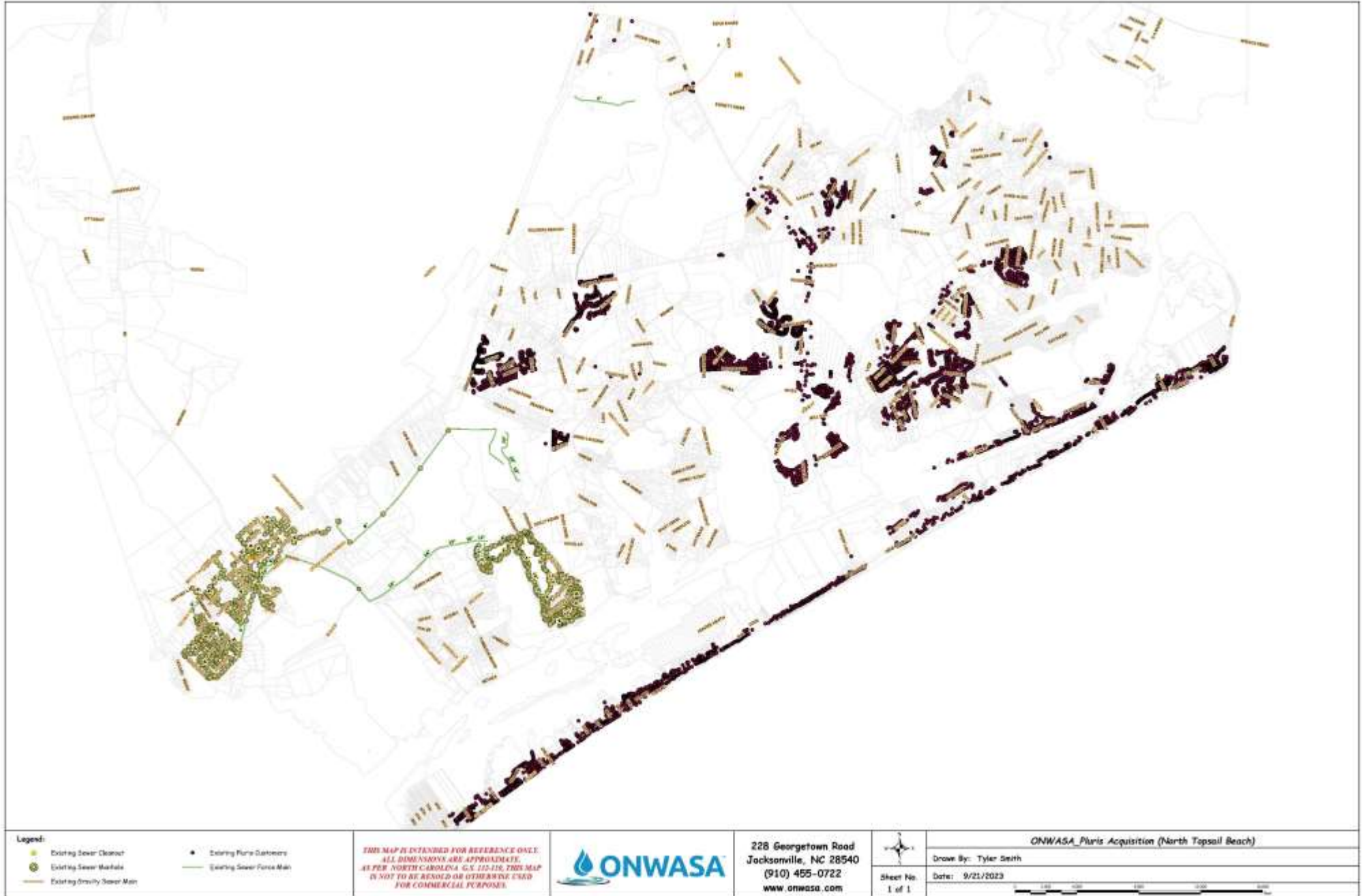
All cost estimates are based on project information available at the time this report was prepared.

Actual costs for individual projects will not be final until contracts are awarded; estimated costs are for planning purposes only.

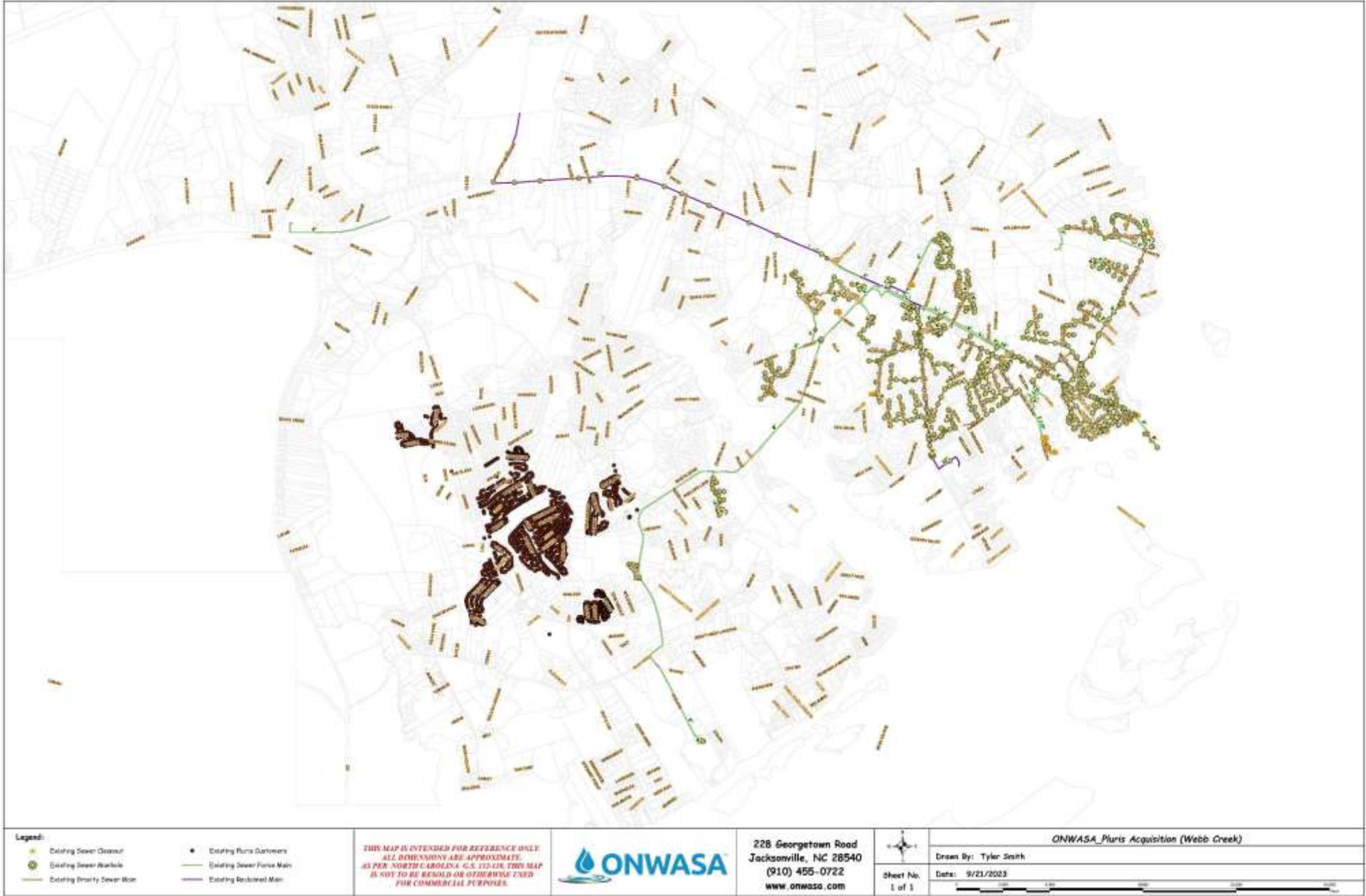
Type Codes: E - System Expansion Project R - Repair/Rehabilitation Project

D - Design, C - Construction

New sewer customers and service area with the Pluris Acquisition. (North Topsail, Sneads Ferry)



New sewer customers and service area with the Pluris Acquisition. (Webb Creek)



**ONWASA MAIN OFFICE FACILITY
WATER CHEMISTRY LABORATORY**

- 4,000 SF BUILDING ADDITION WITH FULL LAB, ADMINISTRATIVE OFFICES AND SUPPORT FACILITIES
- COMPLETED IN DECEMBER 2022
- CONSTRUCTION COST \$2.2 M











NORTHWEST REGIONAL WATER RECLAMATION FACILITY

HURRICANE FLORENCE RECOVERY

- ELECTRICAL SYSTEMS REPAIR AND CRITICAL COMPONENT FLOODPROOFING TO PROTECT ABOVE 500-YEAR FLOOD EVENT
- CONSTRUCTION 75% COMPLETE
- ESTIMATED FINAL COMPLETION JULY 2023
- CONSTRUCTION COST \$6.6 M









ELECT. BLDG.

EMERG





SBR Building

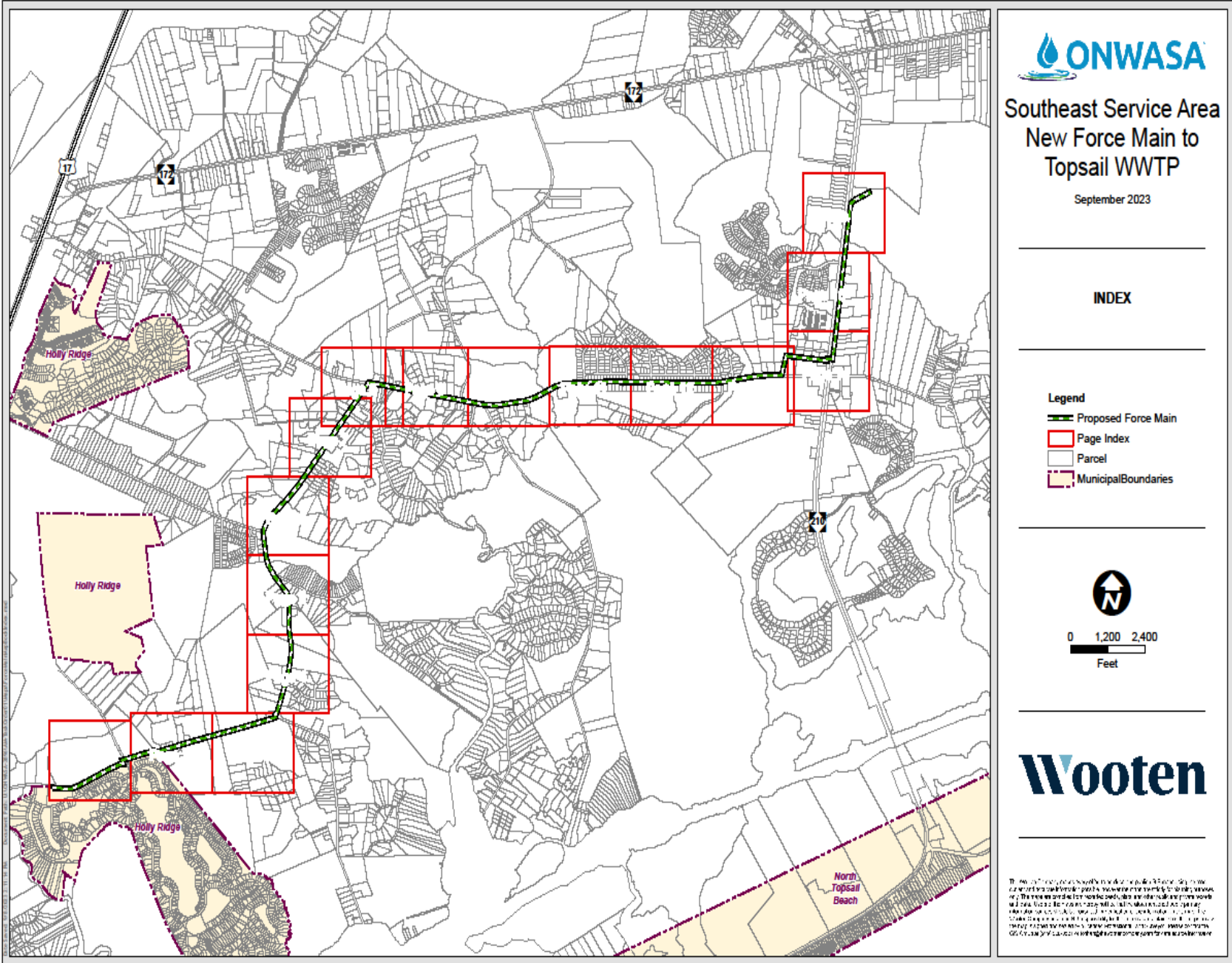


SBR Building



SUMMERHOUSE WASTEWATER INTERIM CAPACITY IMPROVEMENTS PROJECT

- PHASE I-INSTALL ONWASA PROVIDED UV EQUIPMENT, FINE SCREENS, AND MBR TANKS, PUMPS, BLOWERS, AND APPURTENANCES TO MAINTAIN PERMITTED CAPACITY OF 0.180 MGD
- CONSTRUCTION DOCUMENTS BID MARCH 11, 2024, ANTICIPATE AWARD APRIL 2024
- ESTIMATED COMPLETION SEPTEMBER-OCTOBER 2024
- ESTMATED CONSTRUCTION COST \$2.4M



SOUTHEAST SERVICE AREA

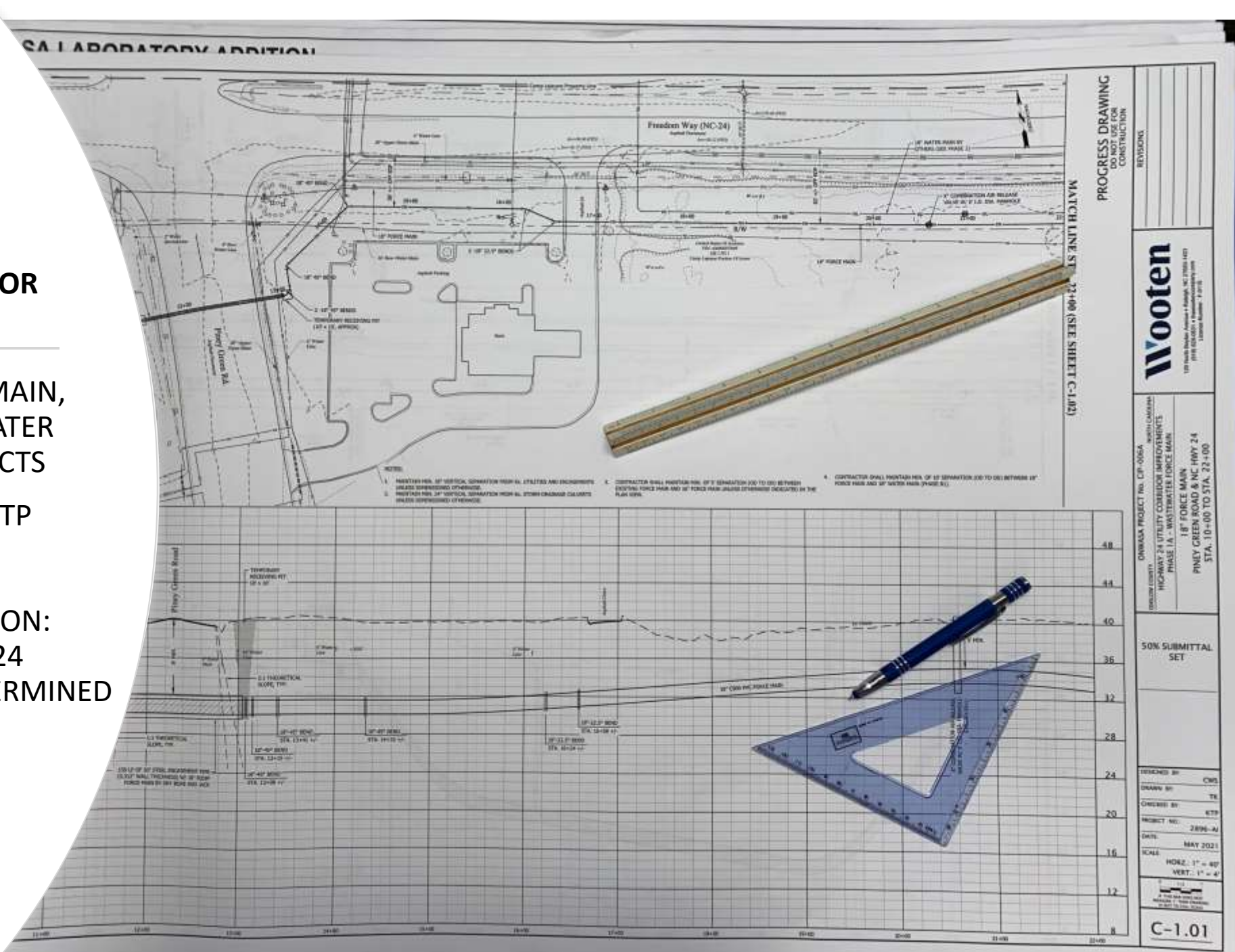
WASTEWATER FORCE MAIN & PUMP STATIONS - HOLLY RIDGE WWTP TO TOPSAIL WWTP

- NEW FORCE MAINS, PUMPING STATIONS PHASE I (ARPA FUNDED) HR WWTP TO SH WWTP; PHASE II – FORCE MAIN, PUMP STATION SH WWTP TO TOPSAIL WWTP
- PHASE I DESIGN 95% COMPLETE, BID DOCUMENTS TO DEQ FAST TRACK PERMIT APRIL 2024; PHASE II DESIGN 5% COMPLETE
- PHASE I ESTIMATED CONTRACT AWARD DECEMBER 2024; FINAL COMPLETION ESTIMATED OCTOBER 2025
- ESTIMATED COST PHASE I \$10M
- PHASE 2 TBD

SWANSBORO WWTP AND HUBERT WTP

HIGHWAY 24 UTILITY CORRIDOR

- NEW WASTEWATER FORCE MAIN, PUMPING STATIONS AND WATER TRANSMISSION MAIN PROJECTS
- REPLACES SWANSBORO WWTP
- DESIGN 90% COMPLETE
- ESTIMATED FINAL COMPLETION:
WASTEWATER BID Apr 2024
WATER TO BE DETERMINED
- ESTIMATED TOTAL COSTS:
WASTEWATER \$27.7 M
WATER \$10.0 M



**TOPSAIL ISLAND
BOOSTER PUMPING STATION**

- NEW POTABLE WATER PUMPING STATION, PROPOSED LOCATION NTB TOWN HALL
- UNDER CONSTRUCTION
- ESTIMATED FINAL COMPLETION OCTOBER 2024
- ESTIMATED TOTAL COST \$3.4 M









New Revenue Stream for ONWASA

ONWASA hired Pines State Forestry, a Timber Management company in 2022 to provide a comprehensive Timber Management Plan for over 1790 acres.

Just in the last two years ONWASA was able to bring in over **\$850,000** in new revenues from timber sales, with an addition **\$360,000** expected from active contracts. That's over **\$1.2M** in revenues in just two years across only 595 acres.

The plan is to reforest these acres to establish a sustainable revenue source for ONWASA for years to come. We have also become NC Tree Farm certified.

We also were awarded two State grants and two State Budget Earmarks for an additional **\$15.5M** to help with upcoming capital projects.

*****ONWASA is funded by Rate Payer Revenue only No Local Tax Dollars*****

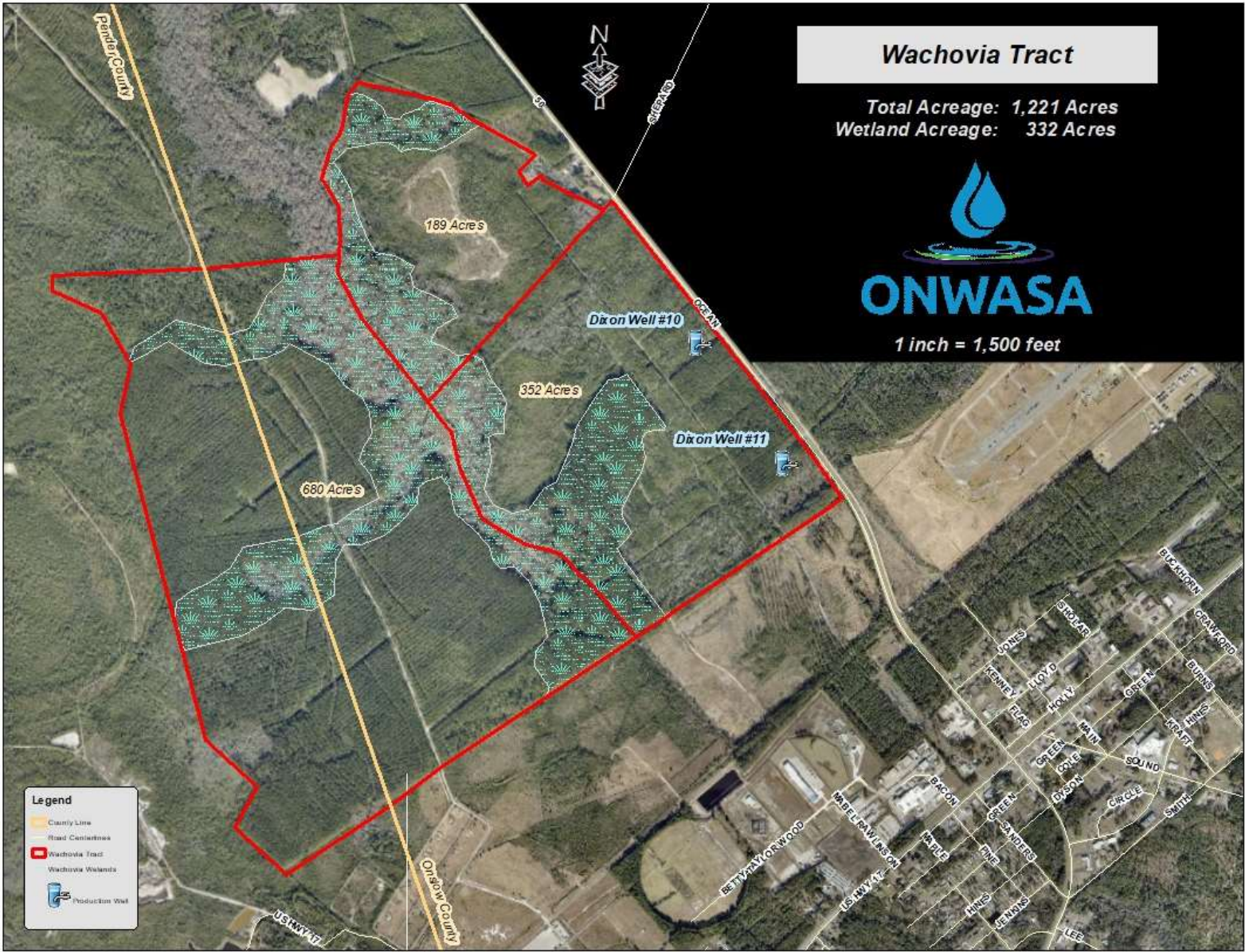
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**NORTH CAROLINA
TREE FARM PROGRAM**



Wachovia Tract

Total Acreage: 1,221 Acres
Wetland Acreage: 332 Acres



1 inch = 1,500 feet

Legend

-  County Line
-  Road Centerlines
-  Wachovia Tract
-  Wachovia Wetlands
-  Production Well



189 Acres

352 Acres

680 Acres

Dixon Well #10

Dixon Well #11

Perdrie County

Orange County

RUCKENSTEIN
 CRAWFORD
 EDWARDS
 HINES
 LARATT
 BRADGER
 JONES
 KENNEDY
 FLAG
 HODD
 HOLLY
 GREEN
 HUNT
 COLE
 EYSON
 SOUND
 CIRCLE
 SMITH
 BACON
 MAPLE
 SANDERS
 HINES
 JENNIS
 LEE
 BETTY WOOD
 MAPLE LAWN
 US HWY 42



**Northwest Regional
Water Reclamation Facility**

**Total Acreage: 986 Acres
Farming Acreage: 206 Acres**



1 inch = 2,000 feet

Legend

- Road Centerline
- NWRWRF
- WWTP



ONWASA EMPLOYEES "CARE"

ONWASA has a program we call ONWASA CARES that allows employees to take up to 16 hours annually and volunteer for Community Organizations and events.

Just this past year we had employees help with the Christmas Cheer Program and food drives for the Jacksonville Rotary Club and local Onslow Outreach programs.

ONWASA Employees donated over \$4000 worth of toys to Christmas Cheer in 2023





MUTUAL AID WITH NCWaterWARN

ONWASA is a member of NCWaterWARN, a water and wastewater agency response network (WARN) group of utilities committed to helping each other conduct response and recovery operations.

In 2017 ONWASA along with the City of Jacksonville sent teams and equipment to the Florida Keys to help with their recovery from Hurricane Irma and in 2018 five teams arrived from the City of Raleigh, City of Wilson, and Greenville Utilities to answer our call for help with the aftermath left by Hurricane Florence.

We also have emergency water interconnections with Pender County, Jacksonville, MCAS New River, Surf City, and NW Water.



STRONGER TOGETHER



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NCWater
WARN



IS YOUR CONTACT INFORMATION UP TO DATE?

ONWASA sends important account reminders and alerts by phone, text, and email. Please keep us updated with current contact information by either emailing us at updateinfo@onwasa.com, phone us at (910) 455-0722, or by accessing the customer portal on our website at www.onwasa.com.





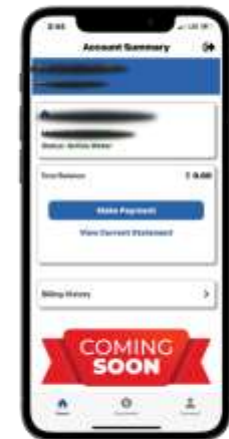
DOING BUSINESS WITH ONWASA

Visit us at www.onwasa.com, on Facebook (@onslowwater), and coming soon the ONWASA Mobile App.

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Questions?

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