

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

1. System Information

Contact Information

Water System Name:	Bald Head Island Utilities	PWSID:	04-10-130
Mailing Address:	PO Box 3009 Bald Head Island, NC 28461	Ownership:	Municipality
Contact Person:	Joseph P. McCann	Title:	Public Services Director
Phone:	910-457-7351	Cell/Mobile:	910-269-6483
Secondary Contact:	Nate Lindsay	Phone:	910-269-5718
Mailing Address:	256 Edward Teach Ext.. Bald Head Island, NC 28461	Cell/Mobile:	910-363-6651

Provisional

Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Galvanized Iron	2-10	3.00 %
Polyvinyl Chloride	2-10	97.00 %

What are the estimated total miles of distribution system lines? 29 Miles

How many feet of distribution lines were replaced during 2025? 0 Feet

How many feet of new water mains were added during 2025? 500 Feet

How many meters were replaced in 2025? 2

How old are the oldest meters in this system? 10 Year(s)

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? 199

What is this system's finished water storage capacity? 0.4000 Million Gallons

Has water pressure been inadequate in any part of the system since last update? *Line breaks that were repaired quickly should not be included.* No

Programs

Does this system have a program to work or flush hydrants? Yes, Annually

Does this system have a valve exercise program? Yes, As Needed

Does this system have a cross-connection program? Yes

Does this system have a program to replace meters? Yes

Does this system have a plumbing retrofit program? No

Does this system have an active water conservation public education program? Yes

Does this system have a leak detection program? Yes

Historically, meter replacement has involved changing meter registers while replacing meter bodies as needed. In 2026, a review of meter age is underway, and all meter bodies over 10 years old are scheduled for replacement.

The leak detection program is active using real-time AMI meter reads.

Water Conservation

What type of rate structure is used? Flat/Fixed, Increasing Block, Other

How much reclaimed water does this system use? 0.1427 MGD For how many connections? 1

Does this system have an interconnection with another system capable of providing water in an emergency? Yes

Bald Head Island Country Club course spray irrigation system.

2. Water Use Information

Service Area

Sub-Basin(s)	% of Service Population	County(s)	% of Service Population
Cape Fear River (02-3)	100 %	Brunswick	100 %

What was the year-round population served in 2025? 5,706

What was the seasonal population and months served in 2025? (if applicable) 8,622 (Jun Jul Aug)

Has this system acquired another system since last report? No

We recently completed an AIA grant and will provide the shapefiles soon.

Water Use by Type

Type of Use	Metered Connections	Metered Average Use (MGD)	Non-Metered Connections	Non-Metered Estimated Use (MGD)
Residential	1,360	0.1366	0	0.0000
Commercial	57	0.0088	57	0.0250
Industrial	0	0.0000	0	0.0000
Institutional	0	0.0000	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.0672 MGD

3. Water Supply Sources

Monthly Withdrawals & Purchases

	Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)
Jan	0.1450	0.2680	May	0.2830	0.3230	Sep	0.2480	0.2570
Feb	0.1410	0.2270	Jun	0.3600	0.4550	Oct	0.2550	0.2690
Mar	0.1570	0.2560	Jul	0.4260	0.6120	Nov	0.2210	0.2980
Apr	0.2160	0.2760	Aug	0.4110	0.5080	Dec	0.1570	0.2980



Ground Water Sources

Name or Number	Average Daily Withdrawal (MGD)		Max Day Withdrawal (MGD)	12-Hour Supply (MGD)	CUA Reduction	Year Offline	Use Type
	MGD	Days Used					
Central #1	0.0094	300		0.0180			Regular
Central #2	0.0104	300		0.0273			Regular
Contractor Well	0.0207	365		0.0316			Regular
Edward Teach #1	0.0120	365		0.0208			Regular
Edward Teach #2	0.0170	365		0.0360			Regular
Federal #1	0.0149	365		0.0252			Regular
Federal #2	0.0179	365		0.0230			Regular
Federal #3	0.0181	330		0.0266			Regular
Laughing Gull	0.0150	365		0.0237			Regular

Maintenance Well	0.0000	0	0.0000	Regular
Muscadine #1	0.0206	365	0.0288	Regular
Muscadine #2	0.0181	365	0.0259	Regular
Office Well	0.0017	365	0.0223	Regular
Public Safety	0.0181	365	0.0295	Regular
Public Works	0.0163	365	0.0309	Regular
Royal James #1	0.0086	120	0.0187	Regular

Ground Water Sources (continued)

Name or Number	Well Depth (Feet)	Casing Depth (Feet)	Screen Depth (Feet)		Well Diameter (Inches)	Pump Intake Depth (Feet)	Metered?
			Top	Bottom			
Central #1	62	52	52	62	2	55	Yes
Central #2	58	48	48	58	4		Yes
Contractor Well	63	53	53	63	2		Yes
Edward Teach #1	63	53	53	63	2		Yes
Edward Teach #2	62	52	52	62	2		Yes
Federal #1	60	50	50	60	2		Yes
Federal #2	60	50	50	60	2		Yes
Federal #3	52	46	46	52	2		Yes
Laughing Gull	64	54	54	64	2		Yes
Maintenance Well							Yes
Muscadine #1	60	50	50	60	2		Yes
Muscadine #2	61	51	51	61	4		Yes
Office Well	62	52	52	62	2		Yes
Public Safety	52	45	45	52	2	49	Yes
Public Works	54	46	46	54	2		Yes
Royal James #1	63	53	53	63	2		Yes

Are ground water levels monitored? Yes, Semi-Annually

Does this system have a wellhead protection program? Yes

Water Purchases From Other Systems

Seller	PWSID	Average Daily Purchased (MGD)	Days Used	Contract			Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
				MGD	Expiration	Recurring			
Brunswick County Public Utilities	04-10-045	0.0584	365	0.5000	2031	Yes	Yes	6.5	Regular

Water Treatment Plants

Plant Name	Permitted Capacity (MGD)	Is Raw Water Metered?	Is Finished Water Output Metered?	Source
Village of BHI Utilities	0.3600	Yes	Yes	Ground Water

Did average daily water production exceed 80% of approved plant capacity for five consecutive days during 2025? No

If yes, was any water conservation implemented? No

Did average daily water production exceed 90% of approved plant capacity for five consecutive days during 2025? No

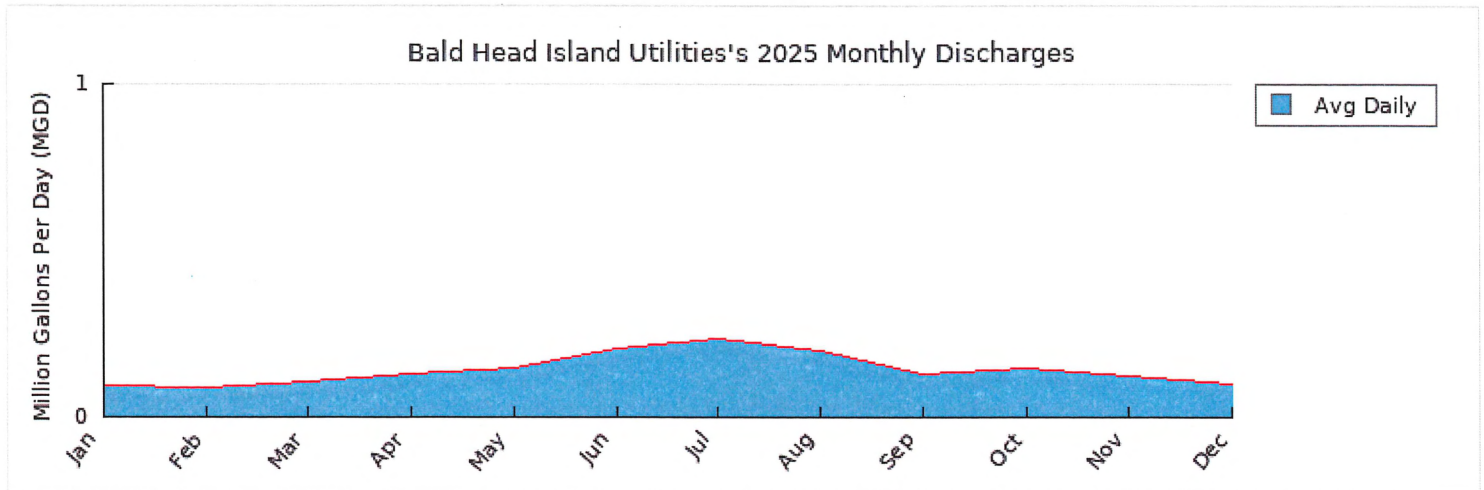
If yes, was any water conservation implemented? No

Are peak day demands expected to exceed the water treatment plant capacity in the next 10 years? No

4. Wastewater Information

Monthly Discharges

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	0.0940	May	0.1468	Sep	0.1304
Feb	0.0871	Jun	0.2063	Oct	0.1461
Mar	0.1052	Jul	0.2380	Nov	0.1246
Apr	0.1304	Aug	0.2023	Dec	0.1007



How many sewer connections does this system have? 1,314

How many water service connections with septic systems does this system have? 13

Are there plans to build or expand wastewater treatment facilities in the next 10 years? Yes

Wastewater Plant plans have been submitted to DEQ.

Wastewater Permits

Permit Number	Type	Permitted Capacity (MGD)	Design Capacity (MGD)	Average Annual Daily Discharge (MGD)	Maximum Day Discharge (MGD)	Receiving Stream	Receiving Basin
NC0085553	WTP	0.0860	0.0860	0.0040	0.1000	Bald Head Island Marina Basin	Cape Fear River (02-3)
WQ0000193	WWTP	0.3000	0.4000	0.1427	0.3059	Reuse and Infiltration Lagoons	Cape Fear River (02-3)

5. Planning

Projections

	2025	2030	2040	2050	2060	2070
Year-Round Population	5,706	6,006	6,106	6,206	6,206	6,206
Seasonal Population	8,622	10,500	10,500	10,700	10,700	10,700
Residential	0.1366	0.2137	0.2137	0.2137	0.2137	0.2137
Commercial	0.0338	0.0176	0.0176	0.0176	0.0176	0.0176
Industrial	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Institutional	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
System Process	0.0672	0.0544	0.0544	0.0544	0.0544	0.0544
Unaccounted-for	0.0286	0.0542	0.0542	0.0542	0.0542	0.0542

Demand v/s Percent of Supply

	2025	2030	2040	2050	2060	2070
Surface Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ground Water Supply	0.3883	0.3883	0.3883	0.3883	0.3883	0.3883
Purchases	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000

Future Supplies		0.0000	0.0000	0.0000	0.0000	0.0000
Total Available Supply (MGD)	0.8883	0.8883	0.8883	0.8883	0.8883	0.8883
Service Area Demand	0.2662	0.3399	0.3399	0.3399	0.3399	0.3399
Sales	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Future Sales		0.0000	0.0000	0.0000	0.0000	0.0000
Total Demand (MGD)	0.2662	0.3399	0.3399	0.3399	0.3399	0.3399
Demand as Percent of Supply	30%	38%	38%	38%	38%	38%



The purpose of the above chart is to show a general indication of how the long-term per capita water demand changes over time. The per capita water demand may actually be different than indicated due to seasonal populations and the accuracy of data submitted. Water systems that have calculated long-term per capita water demand based on a methodology that produces different results may submit their information in the notes field.

Your long-term water demand is 24 gallons per capita per day. What demand management practices do you plan to implement to reduce the per capita water demand (i.e. conduct regular water audits, implement a plumbing retrofit program, employ practices such as rainwater harvesting or reclaimed water)? If these practices are covered elsewhere in your plan, indicate where the practices are discussed here. No Changes

Are there other demand management practices you will implement to reduce your future supply needs? No Changes

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs? No Changes

How does the water system intend to implement the demand management and supply planning components above? No Changes

Additional Information

Has this system participated in regional water supply or water use planning? No

What major water supply reports or studies were used for planning?

Please describe any other needs or issues regarding your water supply sources, any water system deficiencies or needed improvements (storage, treatment, etc.) or your ability to meet present and future water needs. Include both quantity and quality considerations, as well as financial, technical, managerial, permitting, and compliance issues:

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