



# Village of Bald Head Island Annual Drinking Water Quality Report 2015

There are a number of ways  
to save water, and they all  
start with you!

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## VILLAGE OF BALD HEAD ISLAND UTILITIES GENERAL INFORMATION

The Village of Bald Head Island offers **electronic bank draft** from your checking account to take away the worry of paying your utility account every month. Please contact us if you would like to take advantage of this service. Please be sure to reference the account number when remitting your payment. Your account number is located on your bill.

The Village also offers the option of paying your bill on line. Go the Village website at [www.villagebhi.org](http://www.villagebhi.org), look on the upper left side of the page for the green icon (shown below). Once you have clicked on that icon, follow the instructions to get your account set up and pay your bill without having to write a check every month.



As most of you are aware, in an effort to be more cost effective, the Village decided to outsource the billing process. The format of your bill provides account privacy, it is easier to read and understand, plus provides you more information. If you have any questions or concerns regarding your bill, please call Daralyn Spivey at **910-457-9700 Ext 1001** between 8:30 and 3:30 Monday thru Friday.

If you have a service issue, please call our Utilities office at **910-457-7350** and be prepared to leave your name, phone number, island address and a brief description of the issue you are experiencing, a technician will be sent to your location as soon as possible. If you feel your water or sewer issue is urgent you may also contact our "on-call" technician directly at **910-616-7716**.



### UTILITIES DIRECTOR

Ken Bowling, pictured above, is responsible for the day-to-day operations of The Utilities Department. For questions concerning the Utilities Department you may contact:

**Kenneth D. Bowling**

PO Box 3009

Bald Head Island, NC 28461

(Office) 910-457-7351

[kbowling@villagebhi.org](mailto:kbowling@villagebhi.org)

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The Village of Bald Head Island, Utilities Department is happy to report that the entire water system did not receive any violations during the 2015 reporting period. Your Utilities Department is committed to providing you with the most reliable and safest drinking water possible, day in and day out.

### Want to get the latest Island information?

To stay current on the latest Island topics "Like" the Village of Bald Head Island on [facebook](https://www.facebook.com/VillageBHI), and you follow us on [Twitter](https://twitter.com/VillageBHI) (@VillageBHI) Also the [Village Voice Notification System](http://www.villagebhi.org) can be accessed at: [www.villagebhi.org](http://www.villagebhi.org) left side middle of page. Sign-up now!



### Have your bill "emailed"

In an effort to be more environmentally responsible, the Village Utilities Department is now offering the option of receiving your bill via email. Please notify Karen Plaia at [kplaia@villagebhi.org](mailto:kplaia@villagebhi.org) if you are interested.



### WATER AND WASTEWATER

#### Operator in Responsible Charge

Pictured above (R) is David Suther, ORC and his assistant (L) Michael Cartrette. David is responsible for the water operations on Bald Head Island. For questions concerning your water quality you may contact:

**David A. Suther, Sr.**

PO Box 3009

Bald Head Island, NC 28461

(Office) 910-457-7352

[dsuther@villagebhi.org](mailto:dsuther@villagebhi.org)

### WAYS TO SAVE WATER...

- Some homes may have hidden water leaks. Verify that your home is leak free by checking our water meter leak indicator. (The leak indicator is the small red triangle on the water meter dial) Locate the water meter, then let everyone in your home know you are going to perform a water leak test and all water use must stop until you are complete. Then return to the meter and check the leak indicator, if the red triangle is turning, even slightly, you may have a leak
- Never pour water down the drain when there may be other use for it, such as watering plants, or for cleaning around your home
- Operate washing machines and dishwashers only when they are fully loaded. Or when purchasing new appliances, consider those that offer cycle and load size adjustments
- Store drinking water in your refrigerator. Do not let the tap run while you are waiting for water to cool
- Consider insulating your hot water pipes, you'll get hot water faster and therefore reduce water wasted while waiting for it to heat up
- Avoid rinsing dishes before placing them in the dishwasher; just remove large particles of food. Most dishwashers can clean soiled dishes very well, so dishes do not have to be rinsed before washing
- In times of drought, water with a garden hose and only water your plant when they really need it
- Remember to have your irrigation system checked annually for proper operation
- Check your toilets for leaks, put a little food coloring in your toilet tank. If, without flushing, the color begins to appear in the bowl within 30 minutes, you have a leak that should be repaired. Replacement parts are available at the Island Hardware Store and fairly easy to install



### UTILITIES STAFF

The Village Utilities Department is made up of very dedicated employees. (L-R) Charles Trott, Michael Cartrette, Ken Bowling, David Mintz, Wayne Ingram, Karen Plaia, David Suther, Eric Craven, Lloyd Jackson, and Nate Lindsay.

We look forward to working for you for many years to come. For general questions or comments call: **910-457-7350** and please visit our web site for additional information at

[www.villagebhi.org](http://www.villagebhi.org)

Link: [Utilities](#)

### WHERE DOES YOUR WATER COME FROM

Your drinking water comes from surface water and groundwater. Surface water includes rivers, lakes, and reservoirs. Ground water is pumped from wells that are drilled into aquifers.

Aquifers are geologic formations that contain water. The quantity of water in an aquifer and the water produced by a well depends on the nature of the rock, sand, or soil in the aquifer where the well withdraws water.

The water source for Bald Head Island is groundwater and we purchase water from Brunswick County. Our groundwater wells draw from a semi-confined aquifer located at depths ranging from (55-65) feet below the surface of Bald Head Island. Our well system currently has (16) groundwater wells that each produce approximately (38-40) GPM. These state approved wells are known as production wells. The water from the production wells is piped to the Village water treatment facility located at 256 Edward Teach Extension, the well water is then highly filtered by Reverse Osmosis to remove any contaminants and disinfected with chloramines then aerated and stored until consumed. The Village of Bald Head Island also purchases water from Brunswick County on an "as needed basis" to meet daily demand or as our contract agreement dictates. Brunswick County water consists of ground water from the Castle Hayne Aquifer and surface water drawn from the Cape Fear River above Lock and Dam # 1.

Brunswick County water is very compatible with Bald Head Island water therefore both supplies are blended and stored together until consumed.





Listed below are substances detected in Bald Head Island drinking water from 2013 and 2015. Not listed are the hundreds of other substances for which we tested but were not detected.

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Radioactive Contaminants</b> Tested: <i>June 20015</i> ( <i>Required Every (6) Years</i> )						
1. Combined Radium	N	1	pCi/L	0	5	Decay of natural and man-made deposits
<b>Inorganic Contaminants</b> Tested: <i>Sept. 2015</i> ( <i>Required Every (3) Years</i> )						
2. Antimony	N	<.003	ppm	.006	.006	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
3. Arsenic	N	.001	ppm	0	.01	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
4. Barium	N	<.4	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
5. Beryllium	N	<.002	ppm	.004	.004	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
6. Cadmium	N	<.001	ppm	.005	.005	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
7. Chromium	N	<.02	ppm	.1	.1	Discharge from steel and pulp mills; erosion of natural deposits
8. Cyanide	N	<.05	ppm	.2	.2	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
9. Fluoride	N	<.1	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
10. Mercury (inorganic)	N	<.0004	ppm	.002	.002	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
11. Selenium	N	<.01	ppm	.05	.05	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
12. Thallium	N	<.001	ppm	.0005	.002	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b> Tested: <i>Sept 2015</i> ( <i>Required Every (3) Years</i> )						
13. Atrazine	N	<.0001	ppm	.003	.003	Runoff from herbicide used on row crops
14. Carbofuran	N	<.0009	ppm	.04	.04	Leaching of soil fumigant used on rice and alfalfa
15. Oxamyl [Vydate]	N	<.002	ppm	.2	.2	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
<b>Volatile Organic Contaminants</b> Tested: <i>Sept. 2015</i> ( <i>Required Every (3) Years</i> )						
Non-Detect						
<b>Disinfectants and Disinfection Byproducts Contaminants</b> Tested: <i>Quarterly</i>						
16. TTHM [Total trihalomethanes]	N	Avg .016	ppm	N/A	.08	By-product of drinking water chlorination
17. HAA5 [Total Haloacetic Acids]	N	Avg .009	ppm	N/A	.06	By product of drinking water disinfections
18. Chloramines	N	Avg 1.99	ppm	4	4	Water additive used to control microbes (Tested daily)
<b>Lead and Copper Contaminants</b> Tested: <i>Sept. 2013</i> ( <i>Required Every (3) Years</i> )						
19. Copper	N	.482	ppm	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
20. Lead	N	.005	ppm	0	.015	Corrosion of household plumbing systems, erosion of natural deposits
<b>Nitrate (as Nitrogen)</b> Tested: <i>Sept. 2015</i> ( <i>Required Yearly</i> )						
21. Nitrate (as Nitrogen)	N	<1	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**MCLG** - EPA's Maximum Contaminant Level Goal  
**MCL** - EPA's Maximum Contaminant Level  
**ppm** - Parts per million  
**pCi/L** - Pico-curies  
**Non-Detect** - Below reporting limits

**CALCULATE HOW MUCH WATER YOU USE**

1. Locate your Bald Head Island water statement and see how many units of water you are using. What is a unit? A unit is 1,000 gallons. Write the number of units here \_\_\_\_ unit.
2. \_\_\_\_ units X 1,000 = \_\_\_\_ gallons per month.
3. \_\_\_\_ gallons per month divided by 30 (average days per month) = \_\_\_\_ gallons per day.
4. \_\_\_\_ gallons per day divided by \_\_\_\_ (number of people in your family) = \_\_\_\_ gallons per person.

**(SWAP) Results Summary**

Well Name	Susceptibility Rating	Well Name	Susceptibility Rating
Edward Teach # 1,2,3,4,	Moderate	Laughing Gull # 1	Moderate
Cape Fear Station	Moderate	Federal Well # 1,2,3	Moderate
Office Well # 1	Moderate	Muscadine # 1,2	Higher
Royal James Well # 1	Moderate	Central Well # 1,2,5	Moderate

**Source Water Assessment Program (SWAP)**

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section. Source Water Assessment Program (SWAT) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for The Village of Bald Head Island Utilities Department was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area.) The assessment findings are summarized in the table to the left.

The complete SWAP Assessment report for The Village of Bald Head Island may be viewed on the Web at: [www.ncwater.org](http://www.ncwater.org) to obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program—Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634. Email request to [swap@ncmail.net](mailto:swap@ncmail.net). Please indicate The Village of Bald Head Island, PWS ID #04-10-130, and provide your name, address and phone number. If you have any questions about this the report please contact: Source Water Assessment staff by phone at 919-715-2633.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated.