

# 2014 KIAWAH ISLAND UTILITY WATER QUALITY REPORT



*Kiawah Island*  
UTILITY, INC.



June 15, 2015

Dear KIU Customer,

Kiawah Island Utility, Inc. (System 1010008) is providing this Annual Drinking Water Report for the period of 1/1/14 – 12/31/14 as required by The Safe Drinking Water Act. This report is intended to provide you with important information about your drinking water and the effort made by the water system to provide safe drinking water. Attached you will find a summary of our analytical results showing no violations of contaminant levels.

All of the potable water used on Kiawah Island comes from Charleston Water System (CWS) by way of our supplier, St. Johns Water Company. The source of our water is surface water from the Edisto River and Bushy Park Reservoir that has been treated prior to pumping it nearly 45 miles for use on Kiawah Island. Neither St. Johns nor Kiawah treat the water in any way that significantly alters its composition, therefore we have included a link to the 2014 CWS report for your review. Please visit <http://www.charlestonwater.com/2014report> to view their report. We hope this will be not only informative but useful as well.

Although we continue to see regulation changes requiring more and more resources, we maintain our commitment to provide high quality water that meets standards established by The Safe Drinking Water Act. The SC Department of Health and Environmental Control lists potential sources of contaminants for all water supplies. It is easy to get more information about ways in which our state offers protection—just go to The Source Water Assessment and Protection Program (SWAP) for South Carolina at <http://scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/>.

We are hopeful that you will take the time to review this report and will remain confident that your utility staff is working to ensure that you receive the highest quality and adequate quantity of water to meet your needs. If you need additional information, please do not hesitate to contact me at 843.768.0641 or by email at [bdennis@kiawah.com](mailto:bdennis@kiawah.com).

If you require consumer service information, please contact the S.C. Office of Regulatory Staff by phone 803.737.5230 or online at [www.regulatorystaff.sc.gov](http://www.regulatorystaff.sc.gov).

Sincerely,

A handwritten signature in blue ink that reads "Becky J. Dennis".

Becky J. Dennis

General Manager



## CURB STOPS

Water lines run from a main at the street into your home. As pictured right, there is a main valve controlling water flow located on the utility service line. These valves, or curb stops, are for the exclusive use of KIU personnel in order to control the water supply to individual customers. That curb stop is located at, or adjacent to, the customer's property line, but is not be located on the customer's property.

The control of the water supply by the customer should be by means of a separate valve, installed by the customer, and located at a point on the line falling on their property.

When a homeowner makes the decision to turn off his or her water at the curb stop, he often damages the valve. This generally results in the need for the KIU personnel to isolate entire sections of the system to make repairs caused by unauthorized use. This is not only costly but creates an unnecessary interruption in service to other customers.

If you have a need to control the water flow to your home, please have a separate valve installed at a point on the line that falls on your property. This avoids further cost to you and any disruption to others in your section of the system.



## ADDITIONAL WATER LINE COMING TO KIAWAH

As many of you know, a new secondary waterline for Kiawah Island is in the final stages of approval. All easements have been obtained, either directly or thru condemnation proceedings.

KIU is currently in the process of obtaining Army Corps of Engineers inspection and wetlands delineation approval, which is required prior to submitting all other permit applications.

Plans and scheduling will be reviewed with pertinent regulatory agencies prior to preparing contracts for the three phases of construction. KIU anticipates construction to begin in late 2015.

## AVOIDING OBSTRUCTIONS OF HYDRANTS AND METER BOXES



### FIRE HYDRANTS

It is crucial that fire hydrants remain visible and easily accessible for emergency personnel. The Fire Code requires a clearing of 3' all around fire hydrants to insure that emergency personnel can safely engage a hydrant in a timely manner. In an emergency situation, particularly with fire involved, every second counts.

If you have a fire hydrant somewhere on your property, please ensure that the requisite 3' around the hydrant is cleared and visible for emergency personnel.



### METER BOXES

Homeowners are responsible for ensuring safe and efficient access to the meter and curb stop within the meter box at all times. Plants and ground cover not only obstruct access, but also create unsafe conditions for utility personnel reading your meter or responding to a water related emergency at your home.

Please make sure that the area immediately surrounding your meter box is cleared and easy to access.

## EDUCATIONAL INFORMATION



### HOME FIRE PROTECTION

Home fire sprinklers are encouraged and supported by the Town of Kiawah and the St. Johns Fire Department. Combining a smoke alarm with a sprinkler system reduces the chances of dying in a fire by as much as 97 percent. The following link provides useful information and statistics that may help you understand their importance:

<http://www.kiawahisland.org/Data/Sites/1/media/departments/buildingservices/residential-fire-sprinkler-brochure.pdf>



### FREEZE PREPARATION

Although Kiawah Island does not generally have extended periods of freezing temperatures, it is vital to understand the best way to protect your property when freezing conditions do occur.

As addressed earlier in this report, make certain you have an isolation valve installed near your meter to ensure that you are able to isolate your water supply and protect your home from water damage or high water bills due to broken lines. This will allow you to turn off the water to your home quickly and safely without damaging the main line or curb stop.

If you choose to turn off the water to your house for the winter, make sure to drain your house water lines and turn off your hot water heater. Residual water left in these lines can freeze and crack the pipes even when the main water source has been turned off.

## IRRIGATION SYSTEMS

It is important to routinely inspect your irrigation systems to ensure they are maintained properly. These inspections will reduce the risk of wasting water, which is often a common factor in abnormally high water bills.

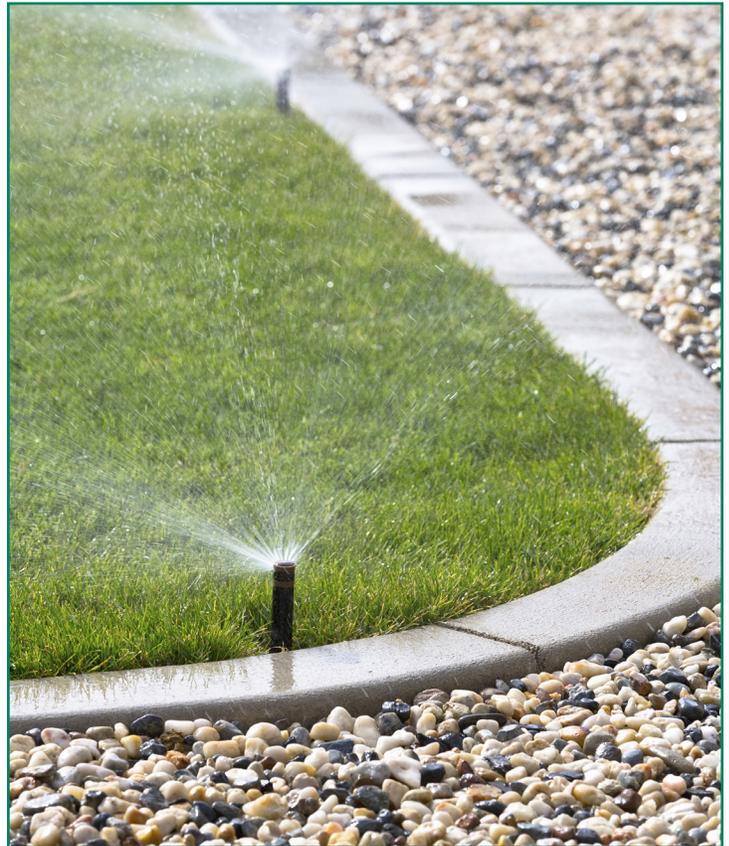
The average home landscape uses 50 percent of the total water consumed in a given household.

An efficient irrigation system requires a quality system design, intelligent water management, and regular system maintenance. An efficient system should be isolated to only water grass and other plant life areas. Avoid the watering of mulch, sand, driveways, and other non-viable areas.

Tune-ups and seasonal adjustments are vital to saving water while keeping plant life at its healthiest. Seasonal adjustments are one of the smartest ways to conserve resources. Plants and grass require less water during the cooler seasons, particularly the grasses found on Kiawah that go dormant during the winter.

New technologies such as subsurface drip irrigation combined with rain and water moisture sensors are certainly the most efficient. In addition to lessening the amount of water lost in overspray and evaporation, these systems turn themselves off when the optimal moisture levels have been reached.

Water is typically wasted most in systems that have not been properly maintained or updated. Broken irrigation heads can merely leak water in the immediate area while clogged heads can be stuck irrigating mulch areas or driveways. Large trucks and delivery services can also crack irrigation heads or water lines when entering driveways. These problems not only result in wasted water, but large spikes in water bills when they go untreated or unnoticed.



### IRRIGATION SYSTEMS ARE TYPICALLY COMPRISED OF:

- **A controller** (which functions as the brains of the system)
- **Valves** (which open and close to release and stop the flow of water to underground pipes)
- **Sprinklers** (which distribute water to specific areas)
- Newer systems also include **rain shutoff devices** or **soil moisture systems**



## ANSWER THE FOLLOWING QUESTIONS TO ENSURE THAT YOUR IRRIGATION SYSTEM IS RUNNING AS EFFICIENTLY AS POSSIBLE

- Is my system watering a flat or sloping area? Sloping areas typically produce run-off, and irrigation run times should be adjusted accordingly.
- Are there spots on the lawn particularly wet after the system runs? Although this could be as simple as water running to low spots on the lawn, this can also indicate leaks or cracks in the system.
- What types of plants are being grown and how much water do they need?
- Calculate the air temperature and typical rainfall to determine what time of day to and amount of time to run the system.



# QUICK STATS FOR 2014



CUSTOMERS

3,972  
WATER

3,343  
SEWER



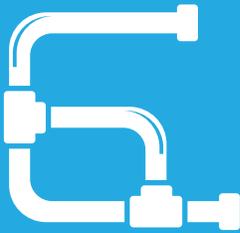
14

TOTAL STAFF

71%  
5+ YEARS

57%  
10+ YEARS

28%  
20+ YEARS



148

MILES OF TRANSMISSION  
LINE MAINTAINED:

- WATER - 68 MILES
- SEWER - 68 MILES
- EFFLUENT - 12 MILES



166,290,000

GALLONS OF WASTEWATER  
TREATED IN 2014



809,055,000

GALLONS OF POTABLE WATER  
PURCHASED FOR DISTRIBUTION  
TO CUSTOMERS



906

CUSTOMER RELATED  
WORK ORDERS RESPONDED TO



46,455

W&S UTILITY BILLS  
GENERATED IN 2014



118

PUMPS MAINTAINED  
(RANGING FROM 2 HP TO 200 HP)

# KIAWAH ISLAND UTILITY, INC.

## 2014 WATER QUALITY TABLE

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable than the general population to contaminants in drinking water.

Parameter	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites over AL	Units	Violation	Possible Sources of Contamination
Copper	2012	1.3	1.3	0.12	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives, corrosion of household plumbing systems
Lead	2012	0	15	0	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits
Parameter	Date Sampled	MCGL	Highest Level Detected	Range	MCL	Unit	Violation	Possible Source in Water
Total Coliform Bacteria	2014	0%	0%	0%	Presence of coliform bacteria <5% of monthly samples	% positive samples	N	Naturally present in the environment
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2014	3	2 - 3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Haloacetic Acids HAA5	2014	23	6.8 - 16.27	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes TTHM	2014	15	5.17 - 19.56	No goal for the total	80	ppb	N	By-product of drinking water disinfection

## TABLE OF DEFINITIONS

**MCLG—Maximum Contaminant Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MCL—Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MRDLG—Maximum Residual Disinfectant Level Goal:** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**MRDL—Maximum Residual Disinfectant Level:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**ppm:** Parts per million or milligrams per liter (one ounce in 7,350 gallons of water)

**ppb:** Parts per billion or micrograms per liter (one ounce in 7,350,000 gallons of water)

**N:** None

**AL—Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.