




The US Environmental Protection Agency has awarded Kiawah Island Utility, Inc.  
**2008 Consumer Confidence Excellence Award**  
 for providing an outstanding drinking water quality consumer report in Kiawah Island.

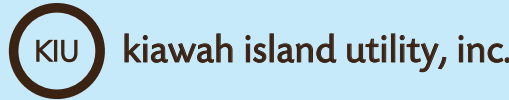



Kiawah Island Utility has teamed with the US Environmental Protection Agency's (EPA) WaterSense program to help consumers save water for future generations and reduce costs on their utility bill. For more information on WaterSense, and for a full list of labeled products and WaterSense irrigation partners, visit [www.epa.gov/watersense](http://www.epa.gov/watersense).



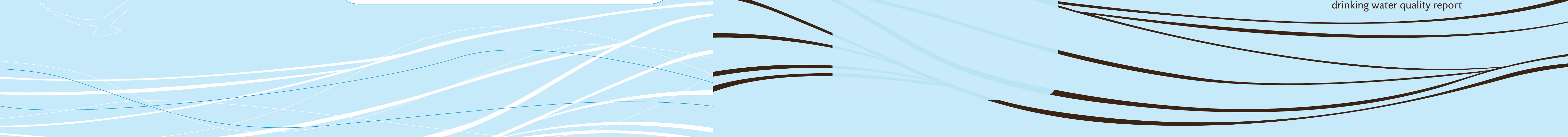
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# 2008

drinking water quality report





## KIAWAH ISLAND UTILITY, INC. WATER QUALITY TABLE

| Parameter                      | Units              | KIU Water Highest Level Detected | Range or Other Comment               | MCL  | Date Sampled | MCLG | Possible Sources in Water                 |
|--------------------------------|--------------------|----------------------------------|--------------------------------------|--|--------------|------|---|
| <b>Total Coliform Bacteria</b> | % positive samples | 0%                               | 0%                                   | Presence of coliform bacteria <5% of monthly samples | 2008         | 0%   | Naturally present in the environment      |
| <b>Copper</b>                  | ppm                | 0.013 (90%)                      | No samples exceeded the action level | AL = 1.3   | 2006*        | 1.3  | Corrosion of household plumbing materials |
| <b>Lead</b>                    | ppb                | 0 (90%)                          | No samples exceeded the action level | AL = 15  | 2006*        | 0    | Corrosion of household plumbing materials |

\* EPA requires testing once every three years.

### TABLE OF DEFINITIONS

#### (MCL) Maximum Contaminant Level

The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible, using the best available treatment technology.

#### (MCLG) Maximum Contaminant Level Goal

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

#### (AL) Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

#### (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.

#### (TT) Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

#### (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 contamination.

## CHARLESTON WATER SYSTEM (1) GENERAL INTEREST

| Parameter                         | CWS Water Average | Highest Level Allowed by EPA Regulation (MCL) |
|-----------------------------------|-------------------|---|
| Alkalinity, ppm                   | 28                | No Standard                                   |
| Chloride, ppm                     | 23                | 250   |
| Color, PCU                        | 3                 | 15  |
| Conductivity, umhos/cm            | 213               | No Standard                                   |
| Hardness, ppm                     | 60                | No Standard                                   |
| Iron, ppm                         | 0.10              | 1.3   |
| Manganese, ppm                    | <0.05             | 0.05  |
| Ortho-phosphate, ppm              | 1.3               | No Standard                                   |
| Silica, ppm                       | 5.7               | No Standard                                   |
| Sodium, ppm                       | 19                | No Standard                                   |
| Temperature, C                    | 22                | No Standard                                   |
| Total Dissolved Solids (TDS), ppm | 120               | 500   |

## (2) WATER QUALITY TABLE

| Parameter                      | Units              | CWS Water Highest Level Detected                       | Range or Other Comments                         | MCL  | Date Sampled | MCLG      | Possible Sources in Water   |
|--------------------------------|--------------------|--|---|--|--------------|-----------|---|
| Total Coliform Bacteria        | % positive samples | 1.6%<br>highest level detected in any monthly sample   | 0% to 1.6%                                      | presence of coliform bacteria in >5% of monthly samples                                | 2008         | 0%        | naturally present in the environment (all repeat samples were satisfactory) |
| Turbidity                      | NTU                | 0.13   | 100% lowest monthly % of samples meeting limits | Requires a specific treatment technique (TT). 95% of monthly samples must be < 0.3 NTU | 2008         | none      | soil runoff   |
| Copper                         | ppm                | 0.051  | no samples exceeded the action level            | AL = 1.3   | 2006         | 1.3       | corrosion of household plumbing materials                                   |
| Lead                           | ppb                | 3  | 1 sample exceeded the action level              | AL = 15  | 2006         | 0         | corrosion of household plumbing materials                                   |
| Nitrate/Nitrogen               | ppm                | 0.37   | N/A   | 10   | 2008         | 10        | runoff from fertilizers   |
| Fluoride                       | ppm                | 0.16 ppm in source water<br>0.81 ppm in finished water | N/A   | 4  | 2008         | 4         | additive to reduce tooth decay  |
| Total Trihalomethanes (THM)    | ppb                | RAA: 17  | 6.9 to 35.8                                     | 80   | 2008         | N/A       | byproduct of water disinfection process                                     |
| Total Haloacetic acids         | ppb                | RAA: 17  | 8 to 29   | 60   | 2008         | N/A       | byproduct of water disinfection process                                     |
| N-Nitrosodimethylamine (NDMA)  | ppt                | 2.3  | N/A   | none   | 2008         | none      | byproduct of water disinfection process                                     |
| Total Organic Carbon (TOC)     | ppm                | RAA: ratio 1.28  | 2.1 to 3.0*                                     | TT   | 2008         | N/A       | naturally present in the environment  |
| Chlorine Dioxide               | ppb                | <100   | 0 to <100                                       | 800  | 2008         | 800       | added to protect against bacteria   |
| Chloramine Residual            | ppm                | RAA: 2.2   | 1.7 to 2.3                                      | MRDL = 4   | 2008         | MRDLG = 4 | water additive used to control microbes                                     |
| Chlorite                       | ppm                | 0.78   | 0.57 to 0.78                                    | 1.0  | 2008         | 0.8       | byproduct of water disinfection process                                     |
| Cadmium                        | ppb                | 0.27   | N/A   | 5  | 2006         | 5         | corrosion of galvanized pipes   |
| Giardia in River Water         | per liter          | 0.0  | N/A   | none   | 2008         | none      | human and animal sources  |
| Cryptosporidium in River Water | per liter          | 0.0  | N/A   | none   | 2008         | none      | human and animal sources  |

\* TOC Values (2.1 to 3.0 ppm) 61% TOC removal. The range of removal was 50% to 65% (45% is required). TOC samples are taken on a daily basis.

### ABBREVIATIONS OF UNITS

NTU = Nephelometric Turbidity Units  
 PCU = Platinum Cobalt Units  
 ppm = parts per million (mg/l)  
 ppb = parts per billion (ug/l)

umhos/cm = micromhos/centimeter  
 C = Centigrade  
 RAA = Running Annual Average  
 ppt = parts per trillion (ng/L)



## Dear KIU Customer:

Kiawah Island Utility, Inc. (System 1010008) is providing this Annual Drinking Water Report for the period of 1/1/08 – 12/31/08 as required by The Safe Drinking Water Act. We anticipate that you will find it both informative and useful throughout the year.

We are pleased to report that another year has passed without exceeding any contaminant levels in samples analyzed. All of the potable water used on Kiawah Island comes from Charleston Water System 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 the analytical results from CWS are included as a part of our annual report.

Although we have seen many regulation changes requiring more and more resources, we maintain our commitment to provide high quality water that exceeds standards established by The Safe Drinking Water Act.

We are hopeful that you will take the time to review this report and will remain confident that your utility staff is working 24/7 to ensure that you receive the highest quality and quantity of water to meet your needs.

Sincerely,



Becky J. Dennis  
General Manager

## Where Does Your Water Come From?

We buy our water from the Charleston Water System (CWS), which is a publicly owned water and wastewater utility. CWS provides safe, clean drinking water to more than 400,000 people in the City of Charleston, James Island, North Charleston, Hanahan, Hollywood, Ravenel, and West Ashley. In addition to their 105,000 water accounts, they provide water to other utilities in the area, including Mt. Pleasant Waterworks, the Town of Sullivan's Island, Isle of Palms Water and Sewer Commission, Town of Folly Beach, City of Lincolnville, St. John's Water Company (serving Kiawah and Seabrook Islands), and Dorchester County Public Works.

Your water is treated at the Hanahan Water Treatment Plant, which uses surface water from the Bushy Park Reservoir and the Edisto River. CWS disinfects the treated water with chloramines and chlorine dioxide to keep it clean as it travels through pipes to homes and businesses. They also add fluoride at levels recommended by the American Dental Association to help prevent tooth decay.

For more information about Charleston Water System please visit their website at [www.charlestonwater.com](http://www.charlestonwater.com).

## What's In Your Water?

There is no such thing as "pure" water. As it moves through the water cycle, water picks up minerals, plant matter, and man-made contaminants that eventually end up in lakes and streams, where many cities get their drinking water. The compounds that may be present in lakes and streams are shown in the table to the right.

While the water treatment process removes many of these compounds, it's impossible to remove them all. The compounds found in our water were all at safe levels, meaning they were below the limits set by the US EPA, which regulates public water systems. The US Food and Drug Administration (FDA) Regulations establish limits for compounds in bottled water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Kiawah Island Utility, Inc. fully supports South Carolina's efforts to prevent contamination in watershed areas that supply drinking water. The SCDHEC report identifies two potential contaminant sources of moderate susceptibility for the KIU deep well ground water system. This deep well is an approved emergency supply for potable use under DHEC guidelines. It's 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 [www.scdhec.net/water/html/srcwtr.html](http://www.scdhec.net/water/html/srcwtr.html).

**Biological Compounds** such as viruses and bacteria which may come from septic systems, agricultural livestock operations, and wildlife.

**Inorganic Compounds** such as salts and metals which can be naturally occurring or the result of storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

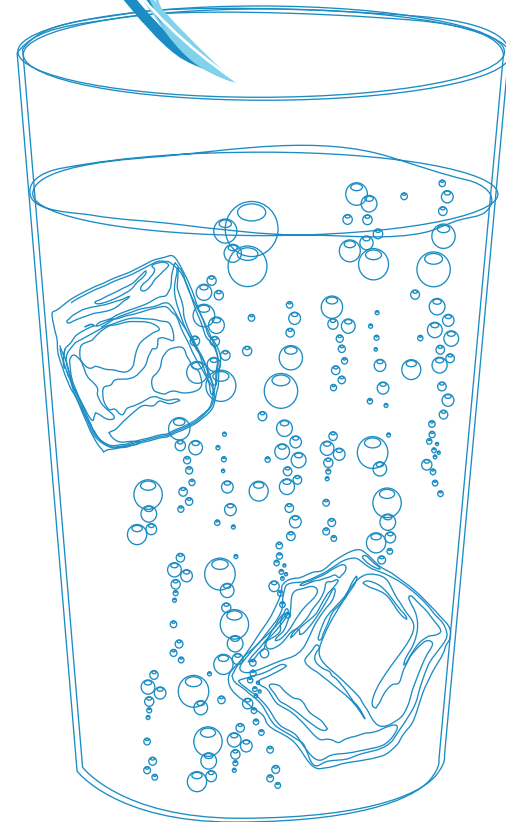
**Pesticides and Herbicides** which may come from a variety of sources such as agricultural, runoff, and residential uses.

**Organic Compounds** including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, can also come from gas stations, runoff, and septic systems.

**Radioactive Material** which can be naturally occurring or be the result of oil and gas production and mining activities.

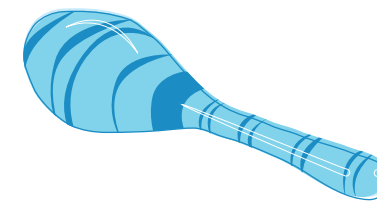
## Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Kiawah Island Utility is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.



## Immuno-compromised Persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons – such as persons with cancer undergoing chemotherapy, persons who have undergone transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants – can be particularly at risk for infection. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.



# 5W's of Backflow Testing

## Who is required to test their backflow device?

All homeowners that have an irrigation system connected to the water supply.

All commercial units having any potential of cross connection.

All customers with fire sprinkler systems.

## What is a Backflow device?

A backflow device can be either a double check valve assembly, pressure vacuum breaker, or a reduced pressure principle backflow assembly.

## Where are they located?

Generally they are installed between the house supply line and the controls for the irrigation systems.

The landscape design team decides the best location on each installation; therefore it may not be the same as your neighbor's.

Some, as in commercial applications, are installed inside the building.

**Note: It is to your advantage to locate your own device as it can become a valuable tool in isolating your irrigation system in the event of a break or faulty component.**

## Why are we required to test these anyway?

The State Primary Drinking Water Regulation [R-61-58.7 (F)] states that a Certified Inspector test these devices to ensure they are operating properly to prevent a cross connection with the drinking water supply.

This requirement not only protects you individually but the entire customer base from potential cross connection in the event of failure in your system.

## When are the test results due?

Satisfactory results are required annually. Kiawah Island Utility has assigned the test periods according to the billing cycles. We give the owners 60 days to complete the tests and have agreed to work with the certified testers to ensure timely results.



## Proper Disposal of Prescription Drugs

### Federal Guidelines:

**Do not flush prescription drugs down the toilet or drain unless the label or accompanying patient information specifically instructs you to do so.**

To dispose of prescription drugs not labeled to be flushed, you may be able to take advantage of community drug take-back programs or other programs, such as household hazardous waste collections events, that collect drugs at a central location for proper disposal.

### If a drug take-back or collection is not available:

1. Take your prescription drugs out of their original containers.
2. Mix drugs with an undesirable substance, such as cat litter or used coffee grounds.
3. Put this mixture into a disposable container with a lid, such as an empty margarine tub, or into a sealable bag.
4. Conceal or remove any personal information, including Rx number, on the empty containers by covering it with black permanent marker or scratch it off.
5. Place the sealed container with the mixture, and the empty drug containers, in the trash.



# How to read your meter:

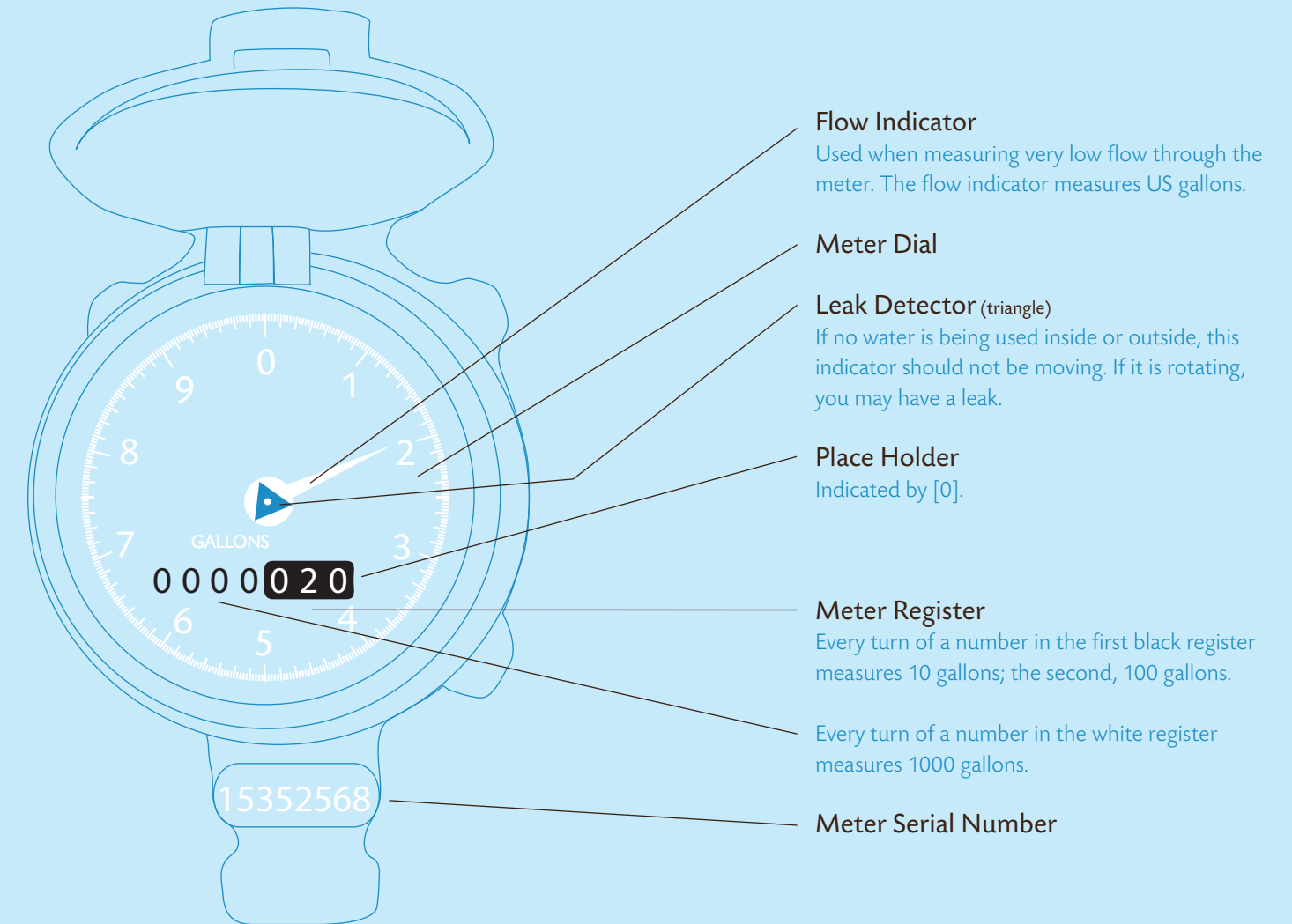
## Where to look on the meter

- Locate the white numbers on the right side of the meter dial (black background). Turns of numbers in the black area register that hundreds of gallons of water have passed through the meter.
- Locate the black numbers on the left side of the meter dial (white background). Turns of numbers in the white area register indicates that 1,000 gallons of water have passed through the meter.
- The meter dial is read like an automobile odometer, straight from left to right.

## Determining your water usage

Use the following example to help read your meter:

- Select a day to take and initial water meter reading. Example 0076400
- Write down the numbers you see on the meter odometer. Example 0083300
- After a period of time has passed (a day or week, for example) read your meter again at approximately the same time of day. Example 0083300
- Subtract your first reading from the second. This is your water usage for the period. Example  $0083300 - 0076400 = 6,900$
- The 6,900 figure indicates that 6,900 gallons of water have been used during the time period between two readings. KIU's average residential customer uses 11,000 gallons per month.





## Get More Information

KIU provides information on demand. Please feel free to contact us to get additional details about your water supply.

**online** [www.kiawahislandutility.com](http://www.kiawahislandutility.com)

**email** [becky\\_dennis@kiawahisland.com](mailto:becky_dennis@kiawahisland.com)

**phone** 843-768-0641

**mail** KIAWAH ISLAND UTILITY, INC.

Becky Dennis

31 Sora Rail Road

Kiawah Island, SC 29455