



# New Customer Booklet

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Dear Utility Customer:

We would like to welcome you as a new customer to Golden Heart Utilities, Inc./College Utilities Corporation. The information contained in this booklet covers a wide variety of topics related to the Utility. I hope that you will take the opportunity to review this information. Not only will it educate you about Utility operations and administration, but will ensure that you are familiar with the water supply system in your home and troubleshooting any problems. The topics covered are as follows:

- Billing Terms and Definitions
- Utility Services of Alaska, Inc. History
- Water Circulation System and Pump Activation
- Water Quality Information
- Electrical Grounding to Water Main
- Troubleshooting Water and Wastewater Service Lines
- Water Meter and Automatic Meter Read (AMR) Information
- Water Pressure Reducing Valve
- Water Conservation Measures
- Water Saving Tips

We look forward to providing you with the highest quality water and wastewater service possible and helpful customer service. If you have any questions regarding the material within this packet, please feel free to call a customer service representative at 479-3118.

Sincerely,

Scott D. MacDonald  
Customer Service Manager

## BILLING TERMS AND DEFINITIONS

The Utility is required by the Regulatory Commission of Alaska (RCA) to individually list each component of wastewater and water charges on its bills. The following definitions are taken from RCA general orders to help you become familiar with the purpose of each charge.

**CUSTOMER OR BILLING CHARGE:** Includes costs associated with serving system customers regardless of variations in their usage. Meter reading, billing, and customer accounting represent these types of costs.

**METER CHARGE:** Costs are determined by the size of the meter servicing the building. The size of the meter is determined by the building system demand and usage patterns. Costs incurred for meter maintenance are also included.

The customer or billing charge and the meter charge appear on your statement as a minimum monthly charge.

**USAGE CHARGE:** Costs are based on the actual consumption by the customer as determined upon reading the meter. The rate is charged per 1,000 gallons and applies to all consumption registered through the meter. For the consumption during May through August, (the summer lawn watering season) the wastewater charge on all single-family and duplex metered accounts is limited to a maximum of the winter average consumption raised to the next even 1000 gallons. There are two (2) types of usage charges:

1. Wastewater Usage Charge
2. Water Usage Charge

**REGULATORY COST CHARGE (RCC):** As a result of a law passed by the Alaska State Legislature in May 1992, all utilities regulated by the RCA are required to collect a RCC. This charge provides funding for the RCA operations. This charge has been in effect since November 1992.

**NOTE:** Please visit our website at [www.akwater.com](http://www.akwater.com) for current billing rates.

*Customer Service...Here to serve you*



## UTILITY SERVICES OF ALASKA, INC. - HISTORY

In a successful effort to provide administrative savings to both Golden Heart Utilities (GHU) and College Utilities Corporation (CUC), Utility Services of Alaska, Inc. (USA) was formed. By organizing a single company to perform the administrative functions for both GHU and CUC, a degree of efficiency is realized.

Administrative areas include Management, Customer Service, Collections, Accounting, Operations, Billing, Information Systems, Procurement, Personnel, Risk Management, and Special Projects. Each serves a vital role in supporting the overall efficiency and success of our Utility companies.

## WATER CIRCULATION SYSTEM AND PUMP ACTIVATION

The Utility has a water circulating system designed to provide its consumers with reliable water service even during winter months when we experience extremely cold temperatures. Normally, circulating pumps are activated about the 10th of November. The Utility makes a judgmental decision based on the weather conditions each year to determine exactly when to activate the pumps. Notices are published in the Fairbanks Daily News Miner each year.

A few consumers with extremely long service hookups, services on dead-end mains, or with sprinkler lines, require private circulating pumps. These customers should service and activate their private circulating pumps as soon as the temperature drops below freezing. The pumps should be lubricated with a lightweight service oil, i.e. 3-IN-1 oil. Please follow pump motor manufacturer's directions and do not over lubricate the pump. Proper lubrication and activation of the circulation pumps should ensure trouble free water service to buildings throughout the winter.

Immediately after the Utility's circulation pumps are activated, you may notice a discoloration of the water. This is only temporary and is due to the scouring of the mains. If the water does become discolored, the Utility advises that you not wash light colored clothes until the water is clear. However, the water is safe to drink. If discoloration continues for more than 1 or 2 days, please contact our Customer Service Department at 479-3118.

## WATER QUALITY INFORMATION

**HARDNESS OF WATER:** Treated water has a hardness of 8.5 grains per gallon or 145 milligrams per liter (145 parts per million). Hardness

is due to calcium and magnesium. Iron and manganese are reduced to 0.02 and 0.01 parts per million respectively, which is negligible and well under the Alaska Department of Environmental Conservation (ADEC) maximum of 0.3 parts per million.

### **ELECTRICAL GROUNDING TO WATER MAINS-HAZARDS & CORROSION OF HOOKUPS**

Electrical current flows corrode hookup lines, causing leaks in customer owned service lines. Repairs are often very expensive, especially in built-up areas. Therefore, customers with water hookups and customers living adjacent to hookups that are installed without electrical grounding rods may be corroded to the point that leaks develop.

Since water mains and hookups are insulated with urethane foam, they provide an extremely poor ground. It is the Utility's position that the water system shall not act as a primary electrical ground for residences within its service area. A separate ground rod must be installed on every electrical service. In addition to the possibility of improving individual water quality, potential hazards to family members and the Utility's employees will be eliminated. These hazards are present in the form of shocks, which may be received when meters are changed or repaired.

Additional information is available by calling Customer Service at 479-3118.

### **TROUBLE SHOOTING**

**IMPORTANT:** Our Customer Service Department is available to assist you from 8:00 a.m. to 5:00 p.m., Monday through Friday, at 479-3118.

**Emergency calls to 479-3118 after hours are received by our automated voicemail system.** Please follow the directions on the voicemail. You will need to select the appropriate option depending upon which Utility provides your service and the type of problem so you may be directed to the appropriate utility response personnel.

# **REMEMBER**

Call Us First  
**Call Us First**

### **SERVICE LINE**

The customer is responsible for the service line to include the pipe, cleanout, and fittings extending from the Utility main to a building. If the wastewater or water system is not working correctly, there are several ways to identify the location of the problem before calling the Utility.

**WASTEWATER BACK UP:** If the back up is first noticed in an upstairs drain, check the basement floor drain or any drain on the lower level. If the drain on the lower level is working, then the back up is inside your home. Run water down all the drains in the house to ensure all of them are blocked (not just one). If *any* drain is properly working, the back up is inside your home. Also, make sure the upstairs drains are not emptying through a downstairs drain, such as a bathtub or floor drain. If *all* the drains are blocked or cause water to back-up in some part of your home, locate the outside sewer clean out. Look for a 3 to 4 inch vertical black cast iron pipe with a threaded bronze cap located outside, near the home, and where the wastewater line enters your home. Remove the cap. With a flashlight, inspect the pipe. If the pipe is empty, the section of line between your house and the clean out is blocked. If the pipe is full of water, the back up is either in your service line between the clean out and the main or in the Utility's main. **Please call the Utility first** and personnel will be dispatched to check the main at no charge. (Note: Please be sure you place the cap back on the clean out.)

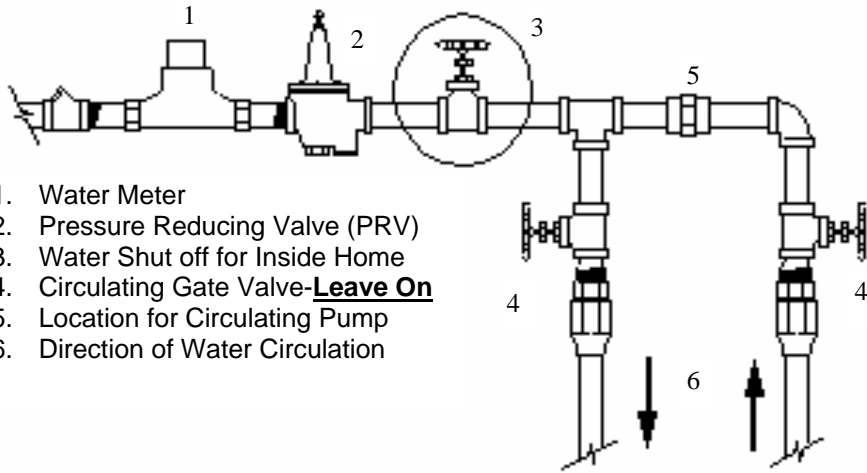
**WATER PROBLEM:** Try other faucets to ensure that you are not having trouble in a line or fixture inside your home. If all faucets in your home are dry, call your nearest neighbor with water service provided by the Utility. If they have water, then you probably have a frozen hookup or a plugged pressure reducing valve strainer, both of which are your responsibility. Call the Utility to verify that the Utility mains are open. If the Utility mains are open you will have to hire a private contractor to correct your problem. Check the yellow pages of the phone book for pumping and thawing contractors or plumbers.

**REMEMBER: Please call the Utility before you call a contractor. If you do not call the Utility first, the Utility will not be responsible for any bills incurred as a result.**

### **PER UTILITY TARIFF**

**SERVICE LINE REPAIRS:** If a problem occurs with a customer owned service line, the customer shall first call the Utility to verify main line status. Failure to contact the Utility will absolve the Utility from any costs from your contractor associated with the repair.

**SERVICE TREE-LOCATED INSIDE THE HOME**



1. Water Meter
2. Pressure Reducing Valve (PRV)
3. Water Shut off for Inside Home
4. Circulating Gate Valve-Leave On
5. Location for Circulating Pump
6. Direction of Water Circulation

**WATER METER AND AUTOMATIC METER READ INFORMATION**

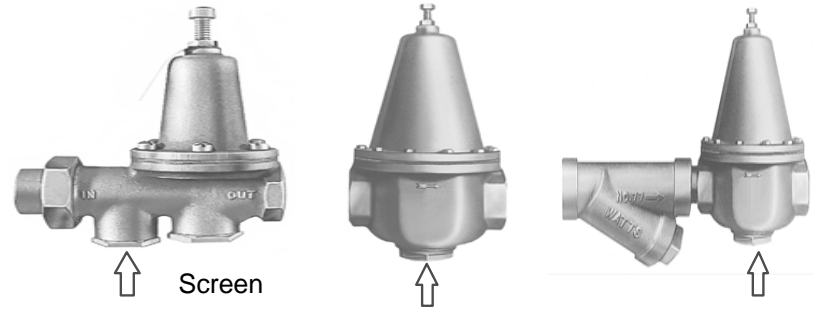
The water meter installed at your property is a *Positive Displacement* meter with magnetic drive, which simply means that it takes the physical presence of water flowing through the meter for usage to register. An extensive meter research document that was prepared by Raymond L. Williams, Executive Vice President of Indianapolis Water Company, cautions water companies to periodically maintain the equipment since the meter will under register rather than over register as it ages.

The Automatic Meter Read (AMR) transponder transmits the monthly meter read with an electronic signal to a mobile interrogator operated by Utility personnel. AMR's provide many advantages to the customer, such as more accurate billings because there is no chance for transposition of figures and no need to annually calibrate the inside and remote readout device.

1. Water Meter
2. RTR (Recordall Transponder Register)
3. Remote Transponder



**WATTS WATER PRESSURE REDUCING VALVES (PRV)**



If your pressure fluctuates, first check the screen in the PRV and your household plumbing screens. These screens should be cleaned every six months. If this does not bring direct results, there is a gasket within the PRV, which may have a pinhole size perforation. Purchase a PRV repair kit available from local plumbing supply stores. You will need to supply the PRV number, which is printed on the PRV. If the repair kit does not solve the problem, replacement of the PRV is recommended, as they do wear out from extended use.

To readjust the water pressure, loosen the check nut and turn the adjusting screw clockwise to raise pressure and counter clockwise to lower pressure. Before adjusting the valve, you should perform maintenance on the screen that is located within the nut as indicated on the above drawing. This screen can become clogged and should be cleaned.

**WASTED WATER  
A LEAK AT 60 PSI – GALLONS WASTED PER MONTH**

<b>1/8 Inch</b>	<b>1/16 Inch</b>	<b>1/32 Inch</b>
<b>98,666 Gal</b>	<b>24,666 Gal</b>	<b>6,166 Gal</b>



## WATER CONSERVATION MEASURES

Approximate gallons used depends upon the make of the appliance and the water usage habits of the household. To determine the exact amount of water used by any appliance or activity, read the water meter before and after use. To ensure accuracy, no water should be used elsewhere during the appliance or activity cycle.

Your monthly bill reflects the gallons recorded on your water meter and a minimum charge based on your building classification. The average consumption for a single-family dwelling is about 5,000 gallons per month. The water usage will vary from household to household based on occupancy and water usage habits. The information provided is to make you aware of different conservation tips and to potentially help **SAVE YOU MONEY** on your monthly Utility bill.

### SOURCE OF WATER CONSUMPTION \*

\* Will vary based on type of equipment and length of time water is running.

Type of Activity	Approximate Gallons Used
Automatic Dishwasher	15
Dishwashing by Hand	20
Tub Bath	30 When Water is Running
Shower	40 (10 Min @ 4 Gal Per Min)*
Brushing Teeth With Water Running	2
Shaving With Water Running	2
Toilet Flush	**1.6
Clothes Washer-Full Cycle	50
Lawn Watering	1-5 Gal Per Minute*

\*\* Unless you have an older toilet, which can use as much as 5 gallons per flush.



## STOPPING LEAKS

Water leaks in the internal plumbing system of your building account for 5 to 10% of all water consumption. Most leaks are due to worn-out faucet washers and faulty toilet tank valves. Correction is usually the easiest and least expensive way to reduce water consumption.

**TOILET LEAKS ARE THE LARGEST SOURCE OF WASTED WATER.** Toilet tanks are often the biggest source of water loss in your home. These leaks are undetectable because you cannot see or hear them. If you are not using a liquid disinfectant in your toilet tank to alter the color of your toilet bowl water, you will never see the stream of water escaping from your tank to the bowl and into the wastewater system. This is wasted water that you still must pay for. If you wish to test your toilet, please see our Customer Service Department for a free dye tablet kit.

**CHECK THE WATER METER.** Checking the water meter will further verify whether or not you have a leak in your internal plumbing. On the face of the AMR water meter located inside your home is a flow finder with a red dial. If all water fixtures in the building are turned off and the red flow finder dial is moving, there is water escaping somewhere in your internal system. If the flow finder dial is not moving, there are no leaks in your internal plumbing. To determine your personal consumption patterns, you can create your own diary by taking readings from your water meter daily, weekly, and monthly.

### TIPS TO HELP YOU SAVE WATER

- Install water saving devices such as flow restrictors in all faucets and showers.
- Do not use the toilet to flush facial tissues, paper, and other similar solid and liquid wastes (using a wastepaper basket is cheaper).
- Take shorter showers. Unless a shower lasts seven minutes or less, bathing in the tub will use less water and will conserve energy.
- Do not let faucets run for washing or rinsing. Always fill a container with water for this purpose or use the drain plug.
- Run an automatic dishwasher with full loads. Do not pre-wash dishes unless necessary. To save energy, turn the dishwasher off at the start of the dry cycle, open the door, and let the dishes air-dry.

## COMMON PLUMBING QUESTIONS

- Defrost frozen food without running water over the packages. Place food in the refrigerator or defrost in the microwave.
- Keep a bottle of water in the refrigerator rather than letting water run in the sink to get a cool drink.
- Turn off the water while brushing your teeth; this step can save a family 5 to 10 gallons per day (or 3,650 gallons a year).
- Rinse hand razors in a sink filled with water rather than under running water.
- Do not use a garbage disposal except at the end of cooking and clean-up periods or when full. Whenever possible, do not use the disposal at all; compost vegetable peelings for your garden or put them in the garbage can.
- When you go on a vacation, turn off the water to the house; a leak while you are away could be expensive and do a lot of damage. Be sure to turn off the water heater. If it should begin to leak and drain dry, it could burn out.
- Run the washing machine with a full load unless a reduced fill setting is available. Use "warm" or "cold" settings if possible.
- Collect water from roof gutters to use for lawn and plant watering.
- Water the lawn in the early morning to avoid evaporation losses.
- Place a layer of mulch around trees and plants so that water can be retained.
- Do not allow sprinkler water to flow into a gutter.
- Avoid sprinklers that produce a fine mist; too much water is lost to wind and evaporation.
- Use pistol-grip nozzles (spring shut-off) on all hoses to avoid waste, and always turn off the faucet tightly to prevent leakage.
- Sweep sidewalks and driveways instead of washing them down with the hose.

1. DISCOLORED WATER (YELLOW, RUSTY, BROWN).  
Water contains minerals such as iron, manganese, calcium carbonate, etc. During normal use small amounts of these minerals settle out of the water and collect at "dead" spots in the water mains. When something out of the ordinary occurs that changes the normal flow pattern such as starting the circulating pumps, flushing a hydrant, shutting off the water to repair a leak, or connecting a new customer, the resulting flow changes can "stir up" these deposited minerals and cause the water to be discolored. There is no health risk to the consumer; however, there can be a negative effect on light colored laundry. "Iron-Out" may be used for laundry problems. The solution to the problem is to flush the water out before using it.
2. WATER SMELLS LIKE FUEL.  
This problem usually occurs in the summer when the circulating pumps are shut off. Some of the Utility's water mains have very low consumption which results in the water standing in the mains for lengthy periods of time. The older mains in the system were constructed of 10 gauge steel pipe with a coal tar lining. This lining can "flavor" the water. We have had tests run that confirm that there is no danger to the consumer and that water meets all requirements of the SDWA, but it does not taste good. The solution to the problem is to flush the water out of the system.
3. WATER TASTES LIKE CHLORINE.  
The Utility chlorinates its water for the protection of our customers. Chlorine is a disinfectant and used to kill bacteria that might live in the water. We normally maintain a chlorine residual of approximately 1.0 of a part per million. This would be equivalent to dumping .1 of a gallon of chlorine into 1,000,000 gallons of water. While this is an extremely small amount of chlorine some people with sensitive taste can and do taste it. There is nothing that the Utility can do about this because we have already made the decision that the risk presented to the customers by the potential presence of bacteria far out weighs the concerns of a few people that don't like the taste.
4. LOUD NOISE IN PIPES.  
If the noise is a banging sound when the water is turned on or off the noise is usually "water hammer". This is caused by the rapid movement of water inside the pipe causing it to bang against something. Could be caused by an improperly restrained pipe or too much water pressure in the pipes. Refer to Page 9 (PRV).
5. SEWER SMELL IN THE HOUSE.  
Sewer smells usually enter the building through the plumbing. It is for that reason that traps are installed on all sinks, showers, tubs, and floor drains. A trap is a U shaped piece of pipe that is designed to stand full of water. The water acts as a seal against sewer gas and keeps it from entering the building through the plumbing. In addition sewer lines are supposed to be vented through the roof so that any sewer gas has a way to escape. If traps are dry, sewer gas can enter the building. If the vents freeze shut in the winter it will sometimes cause sewer smells in the building.

## FIXING LEAKS



A word of caution: most leaks are easy to repair, but if you're not handy with tools you should buy or borrow a basic plumbing book or call your plumber.

### FAUCETS

The majority of faucet leaks are caused by worn-out washers, inexpensive parts that are easily replaced. But there are so many kinds of faucets in use you'd better consult a plumbing book-or plumber-unless you know exactly how to take apart your faucet.



### TOILETS

The best way to see how a toilet works is to remove the lid, pull the handle, and watch what happens.

When water stands too high in a toilet tank it can spill out the overflow tube. A line on the back of the tank usually marks the right level, about 1/2 inch below the top of the tube.

If the water is too high (or too low) bend the float arm (very gently) until the toilet fills to a point about 1/2 inch below the top of the overflow tube. If the water is too *low* you may get a poor flush.

A worn flush-valve ball can leak 10-12 gallons an hour, but so secretly you'll need a dye tablet to spot it. It's a part you can easily remove and replace.

It may also happen that the flush-valve ball isn't seating properly. Check the valve seat for scale or corrosion and clean it if necessary. This may also be the problem if the toilet "runs".

If the ball still won't seat, the guide-wire may be bent or catching in the guide. Straighten the wire or clean the guide until the ball seats properly.

In newer toilets, the guide-wire assembly has been replaced by a chain, and the flush-valve ball by a streamlined "flapper-ball". If you have these parts you won't have problems with a balky guide-wire. If you have to jiggle the handle to keep the toilet from "running", it may be a sticking guide-wire, or the handle itself may be loose. If the handle is loose, tighten the nut that secures it in the toilet tank.

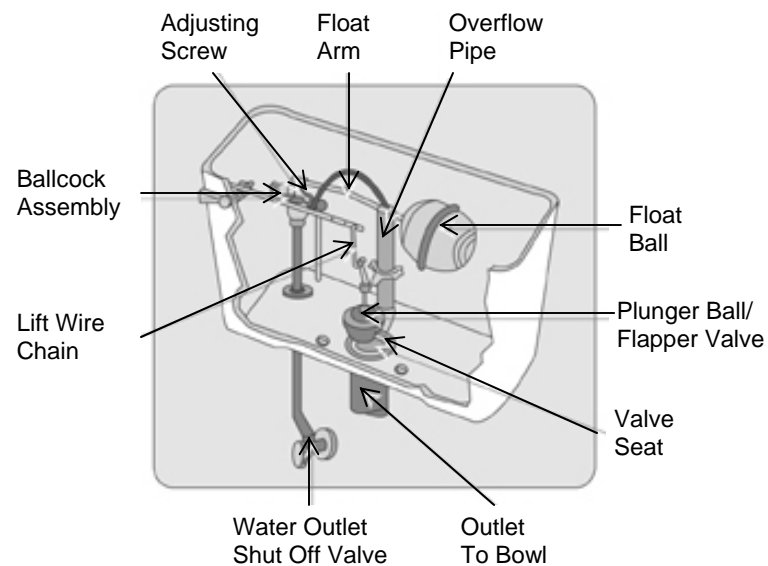
## FIXING LEAKS

If the water that refills the tank won't shut off, you probably have a defective shut-off valve in the ballcock assembly. You'll find that water continues to run and spill into the overflow-tube, eventually wasting tons of water and a lot of money.

Unless you're a good household plumber, you'll want to call a professional to correct it.

In replacing a ballcock assembly, consider getting a new, efficient model like the one below.

To empty the tank for toilet repairs, turn off the water inlet under the toilet. Empty the tank by flushing it, and sponge up the leftover water.





## **PUBLIC NOTICE**

A complete up-to-date tariff of the presently effective rates, charges, rules, and regulations of Golden Heart Utilities/College Utilities Corporation is available in our office for inspection, on demand by any member of the general public during regular business hours with no requirement for a reason for the inspection. A representative of the Utility is on duty to assist in securing information from the tariff. The tariff has been approved by the RCA and applies uniformly to all Utility customers and they are available for viewing on our website.



Please learn more about us by visiting our website site  
[www.akwater.com](http://www.akwater.com)