

## LCA Water Service – Customer Troubleshooting Guide

### TOPIC: High Water Bill

Wonder why your water bill shows higher water volume used than normal? Use this Troubleshooting Guide to help you figure out why, or call LCA’s Customer Care Department at 610-398-1444 (suburban customers) or 610-437-7515 (Allentown customers) to use this guide together!

#### Step 1 – General Water Use Assessment

Look at your current water bill and find the “Service Dates” section that shows the full period of time that you are being billed for. For most residential properties, your bill is issued quarterly, so the Service Dates should cover a 3 month period. Think about your activities over the past 3 months. Some questions to ask yourself:

*Does the billing period cover some of the summer months when you were watering your lawn or filling a swimming pool? Is it possible you left a soaker hose running for a period of time during the warmer weather?*

*Does the billing period cover a holiday season when you had extra house-guests for a period of time?*

*Did you have any plumbing work done over the past 3 months?*

*Do you remember any other plumbing issues that you resolved during this time period such as a water softener cycling too often or a toilet flapper that needed to be replaced?*

Any of these issues may have increased your water usage during the 3 month period covered by your current water bill. If you still think your water bill is too high, it’s time to move to Step 2.

#### Step 2 – Confirm Your Meter Reading & Calculate Current Water Usage

Look at your current water bill and find the current reading shown in the Meter Reading section of your bill. Does the bill say the meter reading is an “Estimate” or an “Actual” reading?

- An Estimate meter reading means that an LCA technician was unable to obtain a good reading from your meter, and your billed usage was estimated based on your prior usage history. Reasons for an estimated meter reading include a blocked readout (obstructed by bushes, fences or unleashed dog), icy weather, or problems with your meter itself that need to be corrected. Find your water meter (usually in your basement near your water heater) and look at the dials on the top of the meter. If the dials show a number that is lower than what we show on your water bill, that means we estimated your bill too high. Call LCA and ask us to adjust your water bill and schedule a service order to correct the metering problem.
- An Actual meter reading means that an LCA technician was able to obtain a good reading from your meter for billing purposes and your water bill is accurate! To confirm your meter reading, find your water meter (usually in your basement near your water heater) and look at the dials on the top of the meter. Using this information, you can use the calculator provided on page 2 to figure out how much water you are using now as compared to what’s on your water bill. **ALLENTOWN CUSTOMERS – See page 4 for more details on how to read your water meter!**



<b>Water Usage Calculator:</b>	<b>Example</b>	<b>Your Calculation</b>
A. Today's date	November 30	
B. Last meter reading date (shown on your water bill)	November 2	
C. How many days from your last meter reading date (B) to today (A)?	28 days	
D. Today's meter reading	2,048,870	
E. Last meter reading (shown as "Current" reading on your bill)	2,027,000	
F. How many gallons of water have you used since your water bill was issued? Subtract E from D.	$\begin{array}{r} 2,048,870 \\ - 2,027,000 \\ \hline 21,870 \text{ gallons} \end{array}$	
G. Calculate your <u>daily water usage</u> : Divide gallons shown in Section F by the number of days shown Section C.	$\begin{array}{r} 21,870 \text{ gals} / 28 \text{ days} = \\ 781 \text{ gallons per day} \end{array}$	
H. <u>Quarterly usage estimate</u> : Multiply your daily water usage you calculated in Section G times 91 days (average number of days in a billing quarter)	$\begin{array}{r} 781 \text{ gallons per day} \\ \times 91 \text{ days} \\ \hline 71,071 \text{ gallons} \end{array}$	
I. <u>Billed Usage</u> shown on your water bill	72,000 gallons	

Compare the answer you have calculated in Section H to the Billed Usage shown on your water bill (Section I).

- If they are the **same or similar**, then you know you are currently using about the same amount of water now as you were during the last bill cycle. In the example shown above, the calculated usage of 71,071 gallons is very similar to the Billed Usage of 72,000 gallons. This shows that water is going through the meter at a consistent rate. If you still think the usage is higher than it should be, then you may want to evaluate your home for leaks to find out where the water is going!
- If the water usage you calculated in Section H is a lot **higher** than what your bill shows, that means you are using even more water now than you did during the billing cycle. You should evaluate your home immediately for leaks to determine where the water is going!
- If the water usage you calculated in Section H is a lot **lower** than what your bill shows, that means water was used during the billing period, but is no longer being used at that rate. Go back up to Step 1 to think about when you might have been using water during the bill cycle.

### Step 3 – Look for Leaks!

Here are a few things to try to determine if you have a leak that is causing water to go through your meter:

**Low Flow Indicators:** The dials on your water meter measure water usage in gallons. However, your meter also has a "low flow indicator" to show that water is going through the meter at a very slow rate, measured in 10ths of a gallon. Look at the top of your water meter for a small triangle or a small wheel numbered 0 to 9. Check to make sure you have all fixtures in your home turned off, and then look at the low flow indicator. If it's moving, that means water is going through the meter, so it must be going somewhere inside your home!

**Water Softener/Filter Check:** Do you have a water softener, filter or other treatment device anywhere in your home? Check it to make sure it is cycling properly.

**Toilet Tank Dye Test:** Toilets are notorious water wasters! If you have a small leak in the seals or flapper mechanism in your toilet, you may not hear it running, but a lot of water can be wasted this way. To test your toilets, put a few drops of food coloring in the toilet tank (behind the toilet – not in the bowl!), and then wait 10 minutes or so without flushing. Then, look in the toilet bowl. If you have any colored water appearing in your toilet bowl, that means you have a leaky toilet that needs to be repaired. A darker color dye (blue or green) works best for this test.

**Overnight Meter Readings:** Look at your water meter before going to bed (or before any long period of time when you will not be using any water), and write down the meter reading from the dials on the meter. When you wake up, look at your meter again to see if the dials changed. If your meter shows usage, that means the water is going through the meter, so it must be going somewhere inside your home! You can repeat this test multiple times and turn off the water to different fixtures one at a time for each test to see if you can isolate where the water is going. Common culprits are water softeners and toilets.

**Call a Plumber:** If you have found a leak, have it repaired quickly to avoid additional water loss. If you can't find the leak, but you've done all the tests we've suggested in this guide, and water is still going through your meter, then you will need to bring a plumber on board to help you find out where the water is going!

**Step 4 – What's Your Water Footprint?**

If you've gone through all the steps in this guide and still don't know why your water usage is so high, it's time to calculate your daily or weekly water usage. To do this, you will need everyone who uses water in your household to help you record how much water they use. But first, take some time to figure out about how much water is used with each type of water use. Most fixtures will include a notation of how many gallons of water they use per use. Make it easy by leaving a log-sheet in each room where you have a sink, toilet or other fixture. Here's one you can use, or make your own.

**Water Footprint Calculator**

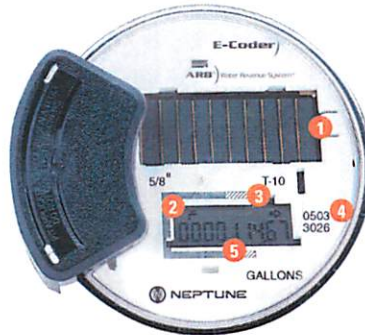
Water Uses	A. Gallons per Use	B. How Many Uses?	Total (A x B)
Toilet Flushing			
Bathing			
Showering			
Cooking			
Cleaning			
Washing Dishes			
Laundry			
Car Wash			
Other:			
Other:			
Other:			
<b>Total Water Usage (add it up!):</b>			

In addition to learning where the water is going in your home, this exercise can also help raise awareness among your family members about how much water everyone is using and ways to reduce their water footprint! A handout from the Environmental Protection Agency on typical indoor water usage is shown on the next page for further reading on this topic.

**Step 5 – Call LCA Anytime!**

Still have questions about your water bill or the usage shown on your bill? Call us at 610-398-1444 (suburban customers) or 610-437-7515 (Allentown customers)! Please be aware that we will be happy to work through the items in this guide with you over the phone. If you require a site visit after going through this guide, we are happy to come out and try to help, but a \$50 site visit fee will be applied to your account (\$150 for after-hours site visits), unless LCA equipment failure has caused the problem.

- Solar Cell 1
- Leak Icon 2
- Flow Indicators 3
- Date of Manufacture 4
- LCD Display 5



	<p><b>SOLAR CELL</b> Located at the top of the E-Coder, supplies power for the LCD panel (light activated).</p>
	<p><b>FLOW INDICATOR</b> Shows the direction of flow through the meter:  <b>ON</b> Water in use.  <b>OFF</b> Water not in use.  <b>Flashing</b> Water is running slowly.  <b>(-)</b> Reverse flow.  <b>(+)</b> Forward flow.</p>
	<p><b>LEAK INDICATOR</b> Displays a possible leak:  <b>OFF</b> No leak indicated.  <b>Flashing</b> Intermittent leak indicates that water has been used for at least 50 of the 96 15-minute intervals during a 24-hour period.  <b>On Continuously</b> Indicates water use for all 96 15-minute intervals during a 24-hour period.</p>
<p>RATE</p>	<p><b>RATE OF FLOW</b> Average flow rate is displayed every six seconds on LCD display.</p>
<p>RF LOG</p>	<p><b>DATA LOGGING</b> Displayed on LCD during extraction of data logging consumption data. *"DL" on dial face denotes data logging</p>
	<p><b>LCD DISPLAY</b> Nine-digit LCD displays the meter reading in billing units of measure: U.S. gallons, cubic feet, Imperial gallons, or cubic metres.</p> <ul style="list-style-type: none"> <li>1 E-Coder basic reading/customary 6-digit remote reading</li> <li>2 Customary sweep hand digits</li> <li>3 E-CoderPLUS reading (8-digit remote reading)</li> <li>4 Testing units used for diagnostics</li> <li>5 Extended reading units</li> <li>6 Customary billing units</li> </ul>