TOWN OF GREENSBORO
TOWN COUNCIL MEETING
December 6, 2018

In Attendance: Mayor Noon, Commissioners Wake, Reichart and DeSimone, and Mackey.

Staff: Chief Mike Petyo, Jeannette Delude, David Kibler, Nicole Armour, Sam Geib, Amber Korell, Cpl. Ray,

Public: Cindy & Bob Harrison, Gary Wyatt, Brittany Wyatt, Michele Keplinger, Terri Sprouse, Zelmar LLC, Cheryl Jones, Gloria Connatser, Alice Winstead, Jessica and Andre from SUEZ, Joe with MD Rural Water, Scott DeLude, Trevor Nichols

The meeting was called to order at 7:00pm.

Mayor Noon stated they had a closed executive session from 6:00- 6:37pm to discuss the Solar Panel project annexation agreement.

Minutes from the November Town Council Meetings were reviewed. Comm. Reichart motioned to approve the November Council Meeting minutes. Comm. Mackey seconded the motion. All in favor, motion passed.

LGIT
Michele Keplinger with LGIT Presented the Greensboro Police Dept. with a $3,200 checks in Grant Money for training purposes. 10% of our premium paid was credited back to us in grant money. In the last 5 years Town of Greensboro has sent 8 employees to LGIT hosted trainings. LGIT recently gave our PD a grant for the new body cameras. $5,239.00 Total has been given back to the town in grant money.

Chief Petyo thanked LGIT and Michele for the grant award. Greensboro officers have completed training and are putting this award to good use within the department.

Mayor Noon swore in Terri Sprouse as an alternate PZ member and Kat Stork as an active Parks and Rec. Member.

Aclara Presentation- Andre and Jessica from SUEZ (project managers)
See power point presentation print off

MD Rural Water- Conservation Presentation with Joe Evert:
See handouts

Joe has been in this career field for 48 years and in that time he has never seen a meter malfunction in the Towns favor. It always reads in the customers favor. Old meters have a tendency to record less water than the newer meters.

A leaking toilet can use 75 gallons a day.

Cherrywood Solar Agreement:
The property to be annexed is 414 Acres and will contain solar panels for a 40 year lease.

Comm. Mackey made a motion to accept the annexation agreement; Comm. Reichart seconded the motion. All approved.

Public Works-Dave Kibler
Goldsboro will have all houses connected by the end of Jan. Public works has been very busy setting up the Christmas lights and decorations.

Police-Chief Petyo
Chief Petyo went over the stats for the month of November.

The 2006 Expedition was sold for $2,300.00

Thanksgiving Day PD and other volunteers delivered 114 thanksgiving meals.

December 8th Chief and Cpl. Ray will attend "Shop with a Cop" at our local Walmart.

Town Manager - Jeannette Delude
Ms. Delude went over the Town Manager report. (Attached)

Commissioner Mackey made a motion to approve the purchase of 40 Holiday street pole decorations to replace the older ones that are falling apart; Comm. DeSimone seconded the motion. All approved.

Bills
Bills were reviewed and approved.

Meeting adjourned at 8:40pm.

Respectfully Prepared by: Amber Korell

AMI Metering Asset Management: Enhance Revenues and Deliver Superior Customer Service

André Noel
Metering Services Product Manager

Jessica Tomochek
Metering Services Project Manager

Town of Greensboro, MD

Industry Overview

Water utilities face many challenges

- Managing Capital Costs
- Reducing Operating Costs
- Non-Revenue Water
- Water Scarcity/Conservation
- Customer Service
- Aging Infrastructure

AMI Metering Asset Management
Enhance Revenues & Deliver Superior Customer Service

Contents

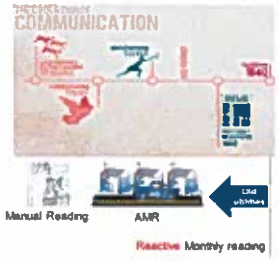
Town Residents

Residents face many challenges

- Billing Disputes
  - High Continuous Usage
  - Unusual Water Activity
  - Leaks
  - Re-Reads
  - Billing Dates Not Customizable
  - Move In / Move Out
- Customer Service (Reactive)

SUEZ Advanced Solutions Offerings & Asset Management / Maintenance Programs

Meter Reading Evolution



Meter Reading Evolution

Today's Solution – Benefits of AMI to Greensboro

Benefits of AMI

- Superior Customer Service
- Customer Enhancements
- Optimize Distribution
- Billing Disputes
- Re-Reads
- Move In / Move Out

Advanced Metering Infrastructure (AMI)

Benefits of AMI: Superior Customer Service

Online reading allows to improve Customer Service

- Anticipate notifications to avoid high bills due to internal leaks
- Ability to provide detailed information to customers
- Ability to resolve most customer inquiries with first call
- Flexible billing
- Quick resolution of In/Outs

Customer look with AMR or Manual reading

Importance of Water Meters

Water Meters Are Important to Everyone

- Meters make it possible to record actual water use.
- Meters allow the system to demonstrate accountability
- Meters encourage water conservation
- Meters aid in the detection of water leaks and waterline breaks in the distribution system

CONFIDENTIAL

Benefits of AMI: Customer Enhancements

Customer Enhancements

- Reduce Billing Adjustments
- Continuous Water Usage
- Unusual Water Activity
- Water Budget Managment
- Custom Billing Dates (future)

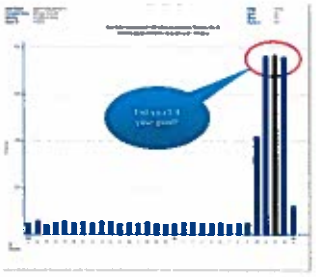
Benefits of AMI – Optimize Distribution

Locate System Leaks

- Distribution System Leaks
- Data Driven
- Acoustic Leak Detection

Benefits of AMI – Finding Leaks

Benefits of AMI – Billing Disputes



Benefits of AMI: Improved Operational Efficiencies

Meter Reading Efficiency

- Labor
- Vehicle
- Miscellaneous Costs

Customer Service Operations

- Fewer calls to call center
- Fewer field visits related to metering issues

Benefits of AMI – Move In / Move Out

Benefits of AMI: Operational Tools

Operational Tools

- Water Accountability
- Conservation Programs
- Meter Right Sizing
- Define Optimal Time in Service or Cumulative registration

Benefits of AMI Real World Experience

Real-World Experience

- Reductions in number of field investigations by utility personnel
- Reductions in volume of inquiries at call center (After an initial increase)
- Identification of significant leaks
- Non-revenue water reduction
- Extremely high performance - 99%+ expected read rate

suez

AMI Metering Asset Management: Enhance Revenues and Deliver Superior Customer Service

Andre Noël
Metering Services Product Manager

Jessica Tomochek
Metering Services Project Manager

Town of Greensboro, MD

suez

Maryland
Department of
the Environment

Facts About: Water Conservation

Why Is Water Conservation Important?

Marylanders have access to an abundance of water much of the time, and we're accustomed to having water available at the twist of a faucet. U.S. citizens use approximately **39 billion gallons** of water a day for household, industrial, and agricultural uses. Unlike the dry western areas of the country, in this area we often overlook the importance of conserving water. Water demand has continued to decline since 2005, even though population has increased by 4% between 2010 and 2015. This is a step in the right direction. However, in order to ensure adequate water resources for our future needs, we must continue to put conservation measures into effect.

Practicing water conservation on a regular basis can prevent or postpone the building of new water supply infrastructure. When utilities are able to reduce demand, they can frequently extend the life of existing infrastructure, saving their consumers the cost of building or renovating. Conservation can also reduce the amount of water that needs to be processed by wastewater treatment plants, again preserving infrastructure and also reducing the amount of waste discharged to streams and rivers. Finally, sound water use practices can make us more resilient during times of drought, negating the need for mandatory interventions.

What is Maryland Doing to Promote Water Conservation?

The State of Maryland has developed a three-pronged approach to promote water conservation across the State. This action plan addresses water conservation in three areas: State facilities, water utilities, and public education and outreach.

State Facilities
On May 24, 2001, Governor Glendening issued an Executive Order requiring all State facilities to conduct water use audits and take actions to reduce their water use. The Executive Order is intended to make State facilities a model for Maryland's citizens and for other States. Any building that is owned, leased, or managed by the State was required to reduce their water use by 10% by the year 2010.

Water Utilities
MDE has asked the State's largest water utilities (together serving more than 4.7 million individuals) to conduct audits to evaluate the amount of residential water used per person. They will be asked to develop and implement a water conservation plan including customer education and possible incentive and rebate offers.

Public Education
The Maryland Department of the Environment has undertaken a public awareness initiative to educate Maryland's citizens about the importance of conserving water.

Tips for Saving Water Inside the Home

Approximately sixty percent of total household water supply is used inside the home in three main areas: the kitchen, the bathroom and the laundry room. Follow these tips to reduce water use indoors:

- Make sure all faucets are tightly turned off and not leaking: *A leaking faucet could waste up to 4,000 gal/year*
- Replace old faucets with new water-efficient models or install aerators to reduce flow

In the Kitchen

- Run dishwasher only when full
- Consider water use when purchasing a new dishwasher: *New water and energy efficient models use 20% less water*
- Defrost food in refrigerator instead of using running water: *A running faucet uses about a gallon of water per minute*
- Use a dishpan or plug the sink when hand-washing dishes
- Don't pre-rinse dishes before loading into dishwasher
- Keep a container of water in the refrigerator rather than waiting for cold water from faucet

In the Bathroom

- Install low flow toilets or toilet dams
- Test all toilets regularly for leaks: *A leaking toilet could waste up 100 gal/day*
- Do not use the toilet as a wastebasket
- Replace old showerheads: *Low flow showerheads can save 3 gal/min*
- Take shorter showers
- Turn off water when shaving or brushing teeth

In the Laundry

- Run full loads of laundry instead of many small loads
- Consider energy and water efficiency when purchasing new laundry machines: *Newer models use 40% less water and can save up to 6000 gal/year*

Tips for Saving Water Outside the Home

Forty percent of total household water supply is used outside the home. Maryland's water resources are daily sprinkled, squirted, dripped, gushed and often wasted outside the home. Follow these tips to reduce water use outdoors:

Landscape Irrigation

- Install efficient irrigation systems such as drip irrigation, soil soakers, and efficient sprinkler systems
- Set sprinklers for lawn and garden only, don't water the street or sidewalk
- Water the lawn only when the ground is dry and preferably no more than once a week: *The amount of water used by a sprinkler in one hour is equal to the daily water needs of a family of four*
- Water during the coolest part of the day (preferably morning) and never water on windy days: *As much as 30% of water used can be lost to evaporation by watering lawn during midday*
- Pull weeds to decrease competition for water
- Increase mowing height to 2-3 inches and apply mulch to both reduce evaporation and prevent weed growth
- Limit grass areas and use trees, shrubs, and other plants that require less water to landscape your yard: *Grass turf requires 30-50% more water than shrubs and other groundcover*

Other Outdoor Use

- Repair or replace leaking hoses and sprinklers
- Always use an automatic shut-off nozzle on hoses
- Use a broom rather than a hose to clean decks, sidewalks, and other paved areas: *5 minutes of running the hose uses 25 gallons of water*
- Collect rainwater for reuse in the garden whenever possible
- Cover pools to prevent evaporation: *An average uncovered pool loses about an inch of water a week because of evaporation*

For more information, contact the Maryland Department of the Environment's Water Supply Program at (410) 537-3702 or visit our website at https://mde.maryland.gov/programs/Water/waterconservation/

Maryland
Department of
the Environment

Facts About: Xeriscaping

What is *xeriscaping* (pronounced zera-scaping)?
It is a creative way of gardening that promotes water conservation and environmental protection. The term was originally conceived by a water conservation task force in Denver, in 1981, and was derived from the Greek word "xeros" (dry) and "scape" from landscape. Since then the principles have inspired water-conserving landscape programs across the country, but especially in dry, arid regions. Increasingly, people in less dry climates like our Mid-Atlantic region are finding that *xeriscape* principles can help them to maintain a high-quality landscape that uses much less water than a traditional landscape

Whether you're planning an entire landscape design or redesign, or simply looking for simple ways to conserve water in your landscape, try applying these seven principles. You will use less water, and maintain a beautiful landscape that is also resilient during times of water shortage.

1) Good planning and design. Planning and design are the most important aspect of *xeriscape* landscaping. A good design will provide for your desired uses and establish water-use zones. For example, you should group plants according to their watering requirements, leaving a substantial area of the landscape that does not need any watering. Other considerations can include incorporating shade into the design to keep the landscape cooler and reduce water loss, grading the property to reduce runoff, planting for energy conservation, and matching appropriate plants to the design.

2) Soil improvement. Understanding and improving your soil can help to promote water percolation and retention. It's always a good idea to obtain a soil analysis. The Maryland Cooperative Extension offers this service for a nominal fee. Based on the analysis, you can decide what plants will thrive well in your soil, and whether you need to add lime or fertilizer. The addition of organic matter such as compost will improve the texture of the soil and its ability to retain moisture, and can also provide an excellent source of nutrients.

3) Appropriate plant selection. Selecting the right plants for your landscaping will result in a healthy, beautiful, water-conserving environment. Although any plant can be used in a *xeriscape* garden if appropriately grouped, it is best to incorporate plants that don't need to be watered, or that have low water needs. Many native plants are well-adapted to the natural soil and rainfall conditions of our climate, are resistant to pests, and are resilient during periods of stress. But it's also important to consider specific plants requirements within your landscape's microclimate including the soil type, amount of sunlight, growth rate, and the expected size and form of the selected plant. Once established, native plants need no supplemental watering and can also provide habitat for butterflies, birds, and other native animal

species. In addition, plant a diversity of plant species. If you plant too many of one plant species, the plants may then become susceptible to pest or insect infestations.

4) Practical turf areas. Plan your turf areas for their intended use. Turf requires more maintenance and usually more water than other types of landscape areas. Design your turf areas so that they are compact, can be mowed efficiently, and can be watered separately from other landscape plants. Choose turf that is appropriate for the location, considering regional climate as well as whether the site is sunny or shady. Avoid planting turf on steep slopes, and minimize grassy areas by using alternatives such as wildflowers or other native groundcovers.

5) Efficient irrigation. Choose an irrigation system that is suited to the design of the landscape. The options range from using a hand-held hose for watering specific garden areas to installing low-flow irrigation equipment such as drip lines or soaker hoses and using automatic timers, rain sensors, and soil moisture sensors to ensure that systems run only when needed. Install a system that meets your needs and your budget. When you do water, water deeply so that roots grow deep into the soil, enhancing the drought resistance of your plants or grass.

6) Mulching the soil. The use of deep layers of mulch in planting beds helps to retain moisture by preventing evaporation, retard the growth of weeds that compete for water, and prevent erosion. Mulches also insulate the roots of plants and prevent them from becoming too hot or too cold, and they create a soil surface that allows easy penetration of water. Organic mulches such as pine needles and composted leaves also enrich the soil as they decompose, although they need to be reapplied periodically. Inorganic mulches such as gravel or pebbles are useful in unplanted areas such as pathways.

7) Appropriate maintenance. The final principle of *xeriscape* is making certain that you maintain your landscape properly. This includes fertilizing only when necessary and using slow-release fertilizers, testing your soil regularly to maximize nutrient uptake, pruning trees and plants properly to avoid unnatural growth, mowing your grass at the recommended height and often enough so that not more than one-third of the leaf is removed at each mowing, removing weeds routinely so that they don't compete with your plants, and making sure that irrigation systems are operating efficiently.

For more information about Maryland Cooperative Extension programs, visit their website at https://extension.umd.edu/hgic or call the Home and Garden Information Center at 1-800-342-2507. For more information about Maryland's drought management and water conservation initiatives, visit the MDE website at https://mde.maryland.gov/programs/Water/waterconservation/, or call the Water Supply Program at (410) 537-3702.

CONDUCTING A HOUSEHOLD WATER AUDIT

WHAT IS A HOUSEHOLD WATER AUDIT?

A household water audit is an assessment of how much water is used and how much water can be saved in the home. Conducting a water audit involves calculating water use and identifying simple ways for saving water in the home.

WHAT ARE THE BENEFITS OF CONDUCTING A WATER AUDIT?

Conducting a water audit can help you save money by reducing your home water bill (and sewer bill if you are connected to a public sewer system). Conducting a water audit will make you aware of how you use your water and help to identify ways you can minimize water use by implementing certain conservation measures. It is possible to cut your water usage by as much as 30 percent by implementing simple conservation measures and without drastically modifying your lifestyle.

HOW DO I CALCULATE WATER USAGE IN MY HOME?

It is important to realize that water use throughout the year often varies with the season. Most people use more water in the warmer months for gardening, washing cars, and other outdoor uses. If you conduct your water audit in the winter or fall, you should still consider the additional water you use in the summer months. The American Water Works Association (AWWA) estimates that the average indoor water use per person is 94 gallons of water per day; this does not take into account outdoor water use (watering lawns, washing cars).

Calculating Water Use From Your Water Bill

If you obtain water from a community water system, you probably receive a water bill that tells you how much water you use. Many water utilities provide customers with bills that contain information regarding the amount of water consumed and average daily consumption during the billing period. If the average daily consumption is not provided, you can calculate it by dividing the total amount of water used by the number of days in the billing period. Determine whether your water is measured in cubic meters (m^3), cubic feet (ft^3), gallons (gal), or liters (L) and convert to gallons.

For converting into gallons, use the following conversion factors:

$m^3 \times 264 = gal$
$ft^3 \times 7.48 = gal$
$L \times 0.264 = gal$

There are several conversion tools available on the Internet that can be used to make your calculations easier. (http://www.onlineconversion.com/volume.htm or http://www.mathconnect.com/volumel.htm)

Calculating Water Use With A Meter
If your water bill does not provide water consumption data, then you can read your water meter to obtain this information. Water meters measure the total amount of water used in your home and are usually located at the property line or on the house. The meter may measure in cubic meters, cubic feet, gallons, or liters. To obtain your water use over the course of a 24-hour day, read your meter at the same time on two consecutive days. You may want to measure water use for several days and then calculate a daily average.

Estimating Water Use Without A Meter
If you do not have a water meter you can estimate your water use. It will be important to measure all water use, indoor and outdoor, to accurately estimate the quantity of water used. To determine how much you consume water in your home it is necessary to measure water flow from each fixture in your house:

- To calculate flow for faucets (indoor and outdoor) and showerheads, turn faucet to the normal flow rate that you use, and hold a container under the tap for 10 seconds and measure the quantity of water in the container. Multiply the measured quantity of water by 6 to calculate the gallons per minutes (gpm).

- To calculate flow for toilets, turn off the water supply to the toilet, mark the water line on the inside of the tank, flush, and then fill tank with water from tap. Measure the volume of water that is required to fill water back up to the water line mark on the tank and record this number. Turn water on to the toilet to resume normal use.

- If your appliances or fixtures are relatively new, you may be able to obtain the flow rate from the manufacturer's specifications. Otherwise, use the following averages:
    - Washing machine – 41 gal per use
    - Dishwashing machine – 9 gal per use

Next, measure how many times per day or how many minutes each day you use each fixture or appliance. Multiply the water flow per fixture by the minutes per day the fixture is used. Multiply the flow average for each appliance by the number of times the appliance is used each week. Don't forget to include the amount of time you use outdoor faucets each day. The water audit spreadsheet is a useful tool to evaluate water use in the home.

HOW DOES MY WATER USAGE RANK?

The average Maryland citizen uses about 100 gallons of water per day. This includes indoor as well as outdoor water usage. To calculate the per person daily water usage rate, divide your daily water usage by the number of people in your home, and then look at the following chart to rate your water usage.

Gallons Per Person Per Day	Rank	Comments
<80 gal/day	Excellent	Wow! You use water wisely. Please share your conservation techniques with friends and neighbors.
80 – 100 gal/day	Good	Good Job! You use less water than the average Maryland citizen. Look at the conservation tips below to learn how you can conserve even more water.
101 – 120 gal/day	Fair	You use more water than the average Maryland citizen. Read the conservation tips below to learn how you can conserve water.
>120 gal/day	Poor	You use a lot of water. Read the conservation tips below to learn how to conserve water in the home.

HOW CAN I CONSERVE WATER?

Check for Leaks

An average of about 14 percent of residential water is lost through leaking fixtures or pipes. You still pay for this water!

An easy way to check whether you have leaks in your house is to read your water meter. Turn off all water fixtures inside and outside your home, and check the reading on your water meter. Wait one hour, ensuring that no one uses any water, and then check the meter again. If the meter reading has changed, you have a leak somewhere in your home.

Pipes

A leaky pipe is usually pretty obvious. Visually inspect all pipes in your home and look for telltale watermarks on walls or ceilings. In the yard, the ground above the water line may stay wet continuously or water may actually flow on the surface. If a pipe is leaking, repair or replace it.

Toilets

Leaking toilets are common and can be large sources of water loss. A leaking toilet can waste anywhere from several gallons to more than 100 gallons per day (that's over a quarter million gallons per year!). Leaking toilets are not as easily identifiable as leaking faucets. The following are clues that you may have a leak:

- If you have to jiggle the handle to make a toilet stop running;
- If you regularly hear sounds from a toilet that is not being used; or
- If a toilet periodically turns the water on ("runs") for 15 seconds or so without anyone touching the handle.

Even if your toilet does not display any of the above symptoms, it could still be leaking. These "silent leaks" can go undetected for long periods of time, potentially wasting thousands of gallons of water.

To check your toilet for silent leaks, do the following:

- Remove the cover on the toilet tank and set it aside;
- Remove any "in-tank" bowl cleaners and flush so that water in the bowl and tank are clear;
- Add dye to the tank (You can use dye capsules or tablets from the hardware store, but food coloring or powdered fruit drink mixes work well). Use enough dye so that the water has a deep hue;
- Wait for 30 minutes (Do not use toilet during this time period);
- If after 30 minutes the water in the bowl contains dye, then the toilet is leaking (A properly operating toilet will store water in the tank indefinitely without any water running into the bowl).

There are two possible culprits when a toilet leaks, the flush valve or the refill valve. To determine which valve is responsible for the leak, draw a pencil line on the inside of the tank at the water line. Turn the water supply for the toilet off (located behind the toilet) and wait for 20 to 30 minutes. If the water level remains the same, it means the leak is occurring at the refill valve (unit in the left side of the tank). If the water level falls below the pencil mark, the flush valve (unit located in the center of the tank) is leaking.

Most homeowners are capable of making their own toilet repairs. Visit your local home improvement or hardware store, purchase the parts, turn off the water supply to the toilet, and follow the directions. With a little effort, you can conserve many gallons of water and reduce your water bill at the same time.

Faucets

A leaking faucet is easily identified, but do you know how much water can be wasted from what seems like an insignificant drip?

To find out, count the number of drips per minute. You can use the following chart to estimate the amount of water waste, or you can use WaterWiser's© drip calculator.

Estimated Water Loss Through Leaks		
Drips per minute	**Water Wasted per Month**	**Water Wasted per Year**
10	43 gallons	526 gallons
30	130 gallons	1,577 gallons
60	259 gallons	3,153 gallons
120	518 gallons	6,307 gallons
300	1,296 gallons	15,768 gallons

Drips can usually be eliminated by replacing worn washers, or by tightening or repacking the faucet. Replacement washers or repair kits for washerless faucets are available at hardware or home improvement stores.

Retrofit/Replace Fixtures and Appliances

Once you have repaired any leaks in your home, the next step is to evaluate the efficiency of your current fixtures and appliances. Often simple retrofits can conserve a lot of water. The following table provides average water use for conventional and low-flow appliances.

Fixture/Fitting/Appliance	Water Use In Gallon Per
Vintage Toilet*	4-6 flush
Conventional Toilet**	3.5 flush
Low Consumption Toilet***	1.6 flush
Conventional Showerhead*	3-10 min
Low-Flow Showerhead	2-2.5 min.
Faucet Aerator*	3-6 min.
Flow Regulating Aerator	0.5-2.5 min.
Top-Loading Washer	40-55 load
Front-Loading Washer	22-25 load
Dishwasher	8-12 load
* Manufactured before 1978 ** Manufactured from 1978 to 1993 *** Manufactured since January 1, 1994	

Faucets

Retrofitting your faucet with an aerator will help save water in your home. A faucet aerator is a small circular screen that is screwed into the faucet. It reduces flow by adding air to the water, giving the sensation of more water with less volume. An aerator can reduce the flow to about 1 to 2 gpm, reducing your water use by half. Aerators are inexpensive and easy to install.

Check to see if aerators are installed on any faucets. Even if aerators have been installed, they may be older and less efficient. If the flow from your faucet exceeds 2.5 gpm, you should install a new aerator. Some older faucets may not be able to accommodate an aerator. If this is the case or if for any other reason you need to install a new faucet, you should purchase and install a faucet that uses less than 2.5 gpm.

Toilets

The best way to improve toilet efficiency is to replace an old inefficient toilet with a new toilet. Toilets made before 1993 use between 3.5 gallons per flush (gpf) and 8 gpf. New high efficiency toilets use 1.6 gpf or less. Depending on how inefficient your old toilet is, you could reduce your water use by up to 75 percent by installing a new efficient toilet. There are other alternative toilets available, including waterless toilets and composting toilets. Fixtures must comply with Code of Maryland Regulations (your certified plumber is aware of these regulations).

You can reduce water use in older toilets easily and inexpensively by simply installing a displacement device. You can save a half-gallon per flush, which equates to, on average, 12 gallons per day per household. These devices work by displacing water in the tank, thereby reducing the water used per flush. Hardware stores sell plastic or rubber bags that can be filled with water and hung from the side of the tank, or you can place some pebbles in an empty half-gallon milk jug, or other durable container, and fill it with water. Toilet dams work in a similar fashion, by blocking off an area of the toilet tank to decrease the amount of water per flush. Another device that can be used is an early closure device that causes the flapper to close early, releasing a reduced amount of water per flush. Do not place bricks in your toilet tank as they can dissolve and cause future plumbing problems.

Showerheads

Low-volume showerheads use 2.5 gpm or less (older ones use as much as 5 gpm or more), resulting in a water savings as great as 50 percent (on average, about 38 gallons per day per household saved). Low-volume showerheads conserve water through mixing air and water and using different spray patterns to give the sensation of a higher-volume shower. Some showerheads also feature temporary shut-off valves that allow the user to turn off the water while shampooing or washing while maintaining the desired temperature the same. Conserving water in the shower will also lead to substantial energy savings, since showers use hot as well as cold water.

Appliances

On average about 22 percent of indoor residential water is used to wash clothes. The best way to improve clothes washer efficiency is to replace an old inefficient machine with a new high efficiency washer. Traditional clothes washers use approximately 41 gallons per load (gpl) and high efficiency models use a little more than half that, about 23 gpl.

Dishwashers account for only about 1.5 percent of indoor residential water use; however, more efficient models will reduce water use by about 50 percent. It is usually more efficient to wash a full load of dishes in the dishwasher rather than hand washing the same dishes in the sink.

Examine and Modify Your Habits

Some of the simplest and least expensive ways to conserve water involve making small changes in how you use water. A complete water audit should involve a close look at your family's water use habits.

For example:

- Do you let the water run while you brush your teeth or shave?
- Do you run your clothes washer or dishwasher before it is fully loaded?
- Do you take long showers or baths?
- Do you use a dishpan or plug the sink when washing and rinsing dishes by hand?
- Do you pre-rinse your dishes prior to loading them in the dishwasher?
- Do you have an automatic shut-off nozzle on your outdoor hose?
- Do you water your plants during the coolest part of the day?

See our Water Conservation Tips for Homeowners for a comprehensive list of suggestions you might want to consider to help you conserve water in your home.

References

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Maryland Department of the Environment
Water Supply Program
1800 Washington Boulevard
Baltimore, Maryland 21230

For questions, please call 410-537-3706

Conducting a Residential Water Audit

(Enter your data directly into chart and it will automatically calculate results.)

Water Use	Current Water Use		
	Gallons per Minute/Use*	Minutes of Use per Day**	Actual Gallons Used Daily
Kitchen faucet			0
Utility faucet			0
Bathroom faucet #1			0
Bathroom faucet #2			0
Bathroom faucet #3			0
Shower #1			0
Shower #2			0
Shower #3			0
Toilet #1			0
Toilet #2			0
Toilet #3			0
Outside faucet #1			0
Outside faucet #2			0
Dishwasher***			0
Washing machine***			0
Total			0

* Use gallons per minute for faucets and showerheads and gallons per use for toilets, washing machines, and dishwashers.

** Use number of minutes used per day for faucets, showers and outdoor faucets and the times used per day for toilets.

*** Use the number of times per week that you use each appliance.

Calculating Current Use

1) To determine gallons per minute (gpm) used for faucets and showerheads, turn on the fixture and measure the amount of water collected in a container in 10 seconds, multiply this quantity by 6 to calculate gpm. For toilets, shut off water, mark water line in tank, flush toilet, and measure the quantity of water it takes to fill the tank. If water use data for appliances is unknown, assume 9 gallons for a dishwasher and 41 gallons for a washing machine.

2) Estimate the total number of minutes or times per day each fixture is used.

3) To calculate total water use multiply gpm by minutes/times of use.

WATER EDUCATION FOUNDATION

UP CLOSE AND PERSONAL: WATER USE AT HOME

Taking a bath or shower

9-12 gallons per person

Watering the lawn

180 gallons

Washing dishes by machine

8-13 gallons

Washing clothes

35-50 gallons

Washing the car

50 gallons

Brushing your teeth

2-5 gallons

Cooking

5-10 gallons

Flushing the toilet (once)

1.6-7 gallons, depending on the type of toilet

Leaking toilet (per day)

60 gallons

** amounts are average estimates

REFERRING PAGES

POSTS

Food Facts: How Much Water Does It Take to Produce ... ?

Water Conservation Tips

How to Save Water Inside and Outside of Your Home

Fresh water is already a finite resource in California so with or without drought conditions it's important to reduce water use where and when possible.

Record rain fall hit much of California at the beginning of 2017, prompting the governor to declare a five-year drought emergency over in most of the state on April 7, 2017.

Town of Greensboro

Memo

To: Mayor & Council

From: Jeannette DeLude

Date: **11.1.18**

- The court hearing for 308 Bernard Avenue has been postponed to Feb. 8th because the mortgage company started foreclosure proceedings so we needed to include them in the suit and notification had to be given.
- We have received the agreement for the RFP for the continuation of the sewer system to the North County that we had agreed to pursue since we had received the grant money. We will need the Mayor to sign two copies, one for our records and one to send back to initiate the work.
- We had our initial conversation with the students from the Capstone Project. They have taken our information back to the University for approvals. We should hear something in the near future on if the project we have proposed will be accepted.
- Nicole and I attended the County's meeting on the new Impact Fees that take effect tomorrow. The impact fee will apply to any new residential building. It is $5000 per unit for single and multi-family dwellings. If it is a 55 or older community the fee will be $2000 per unit. The $5000 fee is to be used for schools and the $2000 will be for Fire and EMS. The previous excise tax that was in place has been abolished but if a lot owner had paid that fee previously, they would be exempt from the new impact fee. The only thing the town has to do is make sure that we have a signed form from the county stating the fees have been paid prior to issuing a building permit. You each have a copy of the legislation in your packets.
- The Halloween Contest Winners for this year are :
    - 1place- Deborah Schultz 116 W Sunset Avenue
    - 2place- Garrett Eaton 115 N Main Street

- 3place- Brandon Neithercott 410 Mallard Drive
- Honorable Mentions- Ray Branhum 103 Wood Duck Drive

- They will be presented with their prizes at the next Parks Board meeting on Dec. 12th.
- Our new sign has been installed. The letters that came with it were the wrong size so we are just waiting on them to come in and we will be posting information.
- The Department Heads will start working on the budget next month so if there is anything you want us to consider for the upcoming budget cycle please let me know. The budget request procedures for outside organizations have been sent out to those who previously requested funds from the Town. We have also posted the information on Facebook and on our website for anyone else who may have a request.
- On Dec. 11th we will have training for our new website for all the girls in the Town hall , as well as, the department heads. The training will be starting at 130 and will last approximately 2 hours so we will be closing town hall early that day. We are hoping to have the new site up and running by the first of the year.
- As you know our Christmas Decoration on the poles are very old and we have been unable to get parts for them for some time. We are at the point where they need to be replaced and commercial decorations are very expensive. I asked Sam to do some research to find us some reasonably priced decorations. She found some nice snowflakes that light up. They are 4ft tall and come with all the hardware to hang them for $234.00 each if we purchase this year. That's a savings of $50 per decoration. I would like to purchase 15 this year taking the money from the Parks savings and then put money in the budget to purchase 25 more next year to replace the ones we currently have on the poles. The Lions' Club may be able to help us with some of the expense, I will be meeting with them at a later date.
- Just a reminder we have our Lighting of the City this Saturday. The Parade begins at 6pm and will come down Sunset Avenue ending at the Riverside Park where we will have pictures with Santa , hot cocoa and cookies.
- Also, on Dec. 15th at 12noon we will be having a Wreaths Across America ceremony at our Veterans Park right next to Town Hall and then those participating will go to the Greensboro Cemetery to lay wreaths on the graves of our military heroes in the cemetery. This is open to the public and everyone is encouraged to attend.

SIGN IN SHEET **Meeting:** T.C. @ GVFC Comm. Hall **Date:** 12-6-2018

Name	Street Address	Wish to Speak: Yes or No	If Yes; Topic to be Addressed
Gary Wyatt	13200 Gboro Rd	~~NO~~ may Be	
✓ Michele Keplinger	LGIT	Yes	
Cindi & Bob Harrison			
✓ Terri Sprouse		NO	
Ze Mar, LLC Marty & Zelie Collison	101 Church St, 103 Wood Duck 209 W. Sunset, 600 N. Main	NO	
Cheryl Jones	214 E Sunset Ave Greensboro	NO	
Gloria Cornatzer	501 N Academy St Greensboro 27401	NO	
Alice Winstead	409 N. Academy St Greensboro NC	NO	