

# Did You Know?

We have 6 water resource recovery facilities that treat 70 million gallons of wastewater each day.

We have two water treatment plants.

The Potomac Plant treats

123 million

gallons of water per day, and the Patuxent Plant treats

40 million

gallons of water per day.

2

We produce 60 billion gallons of water a year.

We are the largest provider of water and wastewater services in the state of Maryland.

We provide safe, clean drinking water to 1.8 million people in Prince George's and Montgomery counties.

Our crews repair more than 1,800 water main breaks and

leaks each year.

500,000 people visit our recreation areas for fishing, boating and other outdoor activities each year.

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Woo Hoo! We're 100

### We have 5,700 miles

of water pipe. If you laid that pipe out, it would stretch from here to California and back.

WSSC uses solar panels and wind power to

run our plants.

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Innovation at WSSC



I grew up to be an engineer, but if you had asked me that question when I was 8 or 9 years old, I don't think engineer would have been my answer. There weren't many females with careers in math and science, much less engineering, for me to

As a young girl, I didn't play with dolls, but I loved science and math, and I loved look up to. learning. In fact, the best Christmas was the year I got a desk, a blackboard and index cards. All through school, I studied hard and my love for math and science is

what made me want to become a civil engineering student at Howard University. When I came to WSSC after graduation, I was the first civil engineer to work in our meter shop. During my first 20 years with WSSC, I had eight different jobs. With each job, I learned something new and had more responsibility. My eighth job

I left WSSC in 2006 and spent 10 years working for both Montgomery and Prince George's counties, learning everything I could about the two counties that WSSC serves. In 2016, I was chosen WSSC's first female general manager.

As a female engineer leading a water utility, I know what an important role female engineers play in our society. I encourage all young people, but especially girls, to study science, technology, engineering and math (STEM) and think about having a STEM career. I want to make sure that young problem solvers of today become tomorrow's problemsolving professionals.

And maybe you'll be inspired to be an engineer when you grow up, too.

Carla A. Reid WSSC General Manager/CEO

Only 8% of ninth-grade girls consider a STEM career, compared to **27%** of ninth-grade boys.

Each year, **WSSC** helps **3,500** students (elementary through college) get to know about STEMrelated jobs through fun and educational programs.

### It's About the People

If you've ever been part of a team, you know the importance of working together. At WSSC, we work as ONE TEAM and our team name is H, OPeople.



H<sub>2</sub>O is the chemical name for water, H<sub>2</sub>OPeople come from different so that makes us the "water countries and cultures. We people." It's the perfect name for volunteer in the community. We our 1,700+ employees, all of whom are always learning new things believe in working together to that make us better at our jobs. deliver safe, clean water to all our And we believe in being fit and healthy. All of that makes us a customers. Because whether an employee repairs water main happy team, and makes WSSC a great place to work.

breaks or tests water samples or answers customer questions, each knows that he or she makes a difference and what they domatters.

Go Team!











**Thomasina V. Rogers** Chair FY 2018 Prince George's County











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Karyn Riley Crystal Knight-Lee

Customer Service Director

Montgomery County Prince George's County Montgomery County Prince George's County





General Manager/CEO





for Operations



**Damion Lampley** Gary Gumm J.C. Langley Chief Engineer Utility Services Director **Production Director** 









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There are a lot of different kinds of jobs at WSSC. To explore additional job titles, visit http://info.wsscwater.com/annual-reports/2018/jobs-at-wssc.php

ACCOUNTANT	ENG
ARBORIST	INS
CHEMIST	LAW
CREW CHIEF	MET



**Todd Allen** 

Human Resources

Director

**Chuck Brown** 

Communications &

Carla A. Reid



**Jaclyn Vincent** Chief of Staff



Joe Mantua Deputy General Manager



SINEER PECTOR VYER TER READER

**MICROBIOLOGIST POLICE OFFICER** TECHNICIAN WELDER

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H<sub>2</sub>OPeople do all sorts of important jobs at WSSC. In fact, we could not deliver clean, safe water to our customers without every one of them. We work 24 hours a day, seven days a week, to make sure you get the water you need to wash, flush, clean and brush.

So, let's meet a few of our H<sub>2</sub>OPeople...



### **Bobby Trimble**

Bobby is the superintendent of the **Patuxent Water Filtration** Plant in Laurel, one of two plants at WSSC that produce the clean, safe drinking water delivered to homes and businesses. The Patuxent Plant produces 40 million gallons of water each day. Bobby proudly calls it "some of the finest drinking water in the world."

### **Brian Mosby**

Brian is the superintendent of our Western Branch Water **Resource Recovery Facility** in Upper Marlboro, one of our

six facilities that treat 70 million gallons of wastewater every day. When you flush your toilet, take a shower, or brush your teeth, the water that leaves your house travels to one of our water resource recovery facilities. "The water we treat goes back into the streams and rivers cleaner than the water that's already there," says Brian.



### **James Lawrence**

"A lot of people don't realize WSSC has a police force," says Officer James Lawrence. He's part

of a full-service police department that patrols WSSC's 5,600-acre watershed surrounding our reservoirs by boat, ATV, vehicle and foot. The police also patrol all of our WSSC facilities spread out across Montgomery and Prince George's counties.

### **Diego Garcia**

Diego is one of our utility technicians. He repairs and replaces leaking or broken water and sewer pipes. It's a lot of work, because we have more than 5,700 miles of water pipes and more than 5,500 miles of sewer pipes. Diego says, "I like making sure our WSSC customers always have water flowing from their tap."

### **Sabrina Darius**

Sabrina is a water quality technician in our busy Consolidated Laboratory, where chemists,

lab analysts and microbiologists analyze 500,000 water samples each year to make sure our water is clean and safe. "Water quality for our 1.8 million customers is our top priority," says Sabrina.

### **Jessica Shiao**

Working in the Sewer **Condition Assessment** 

Section, Jessica says her job can get a little dirty, "but we love what we do." Jessica gets to work with cool equipment, like cameras that go into the sewer pipes to see what is going on inside. One of the things they see most is lots of grease in the sewer mains, which can lead to clogs and backups. Jessica reminds everyone: don't put grease down your drain.

# what and you be with water todays

### **The Value of Water**

From the time you get out of bed in the Water is called "life's most precious morning until you leave for school, you use water in almost a dozen ways. And think about the places that depend on water outside your home: hospitals, restaurants, factories, fire stations, car washes, laundromats and much more.

resource." Without water, our lives would not be the same.

So think about all the ways you used water today, and then imagine a day without water. What would that be like?

Can you circle all the ways you use water in the picture below?



٧



### WSSC Service Area by the Numbers

DUCKET

HEADQUARTERS

ANACOSTIA

DEPOT

ANDREWS

TREATMEN

BOWIE

TREATMENT

Western Branc

Parkway

50

MARLBORO

CAPITAL

Damascus

TREATMENT

Seneca

GAITHERSBUR

10NTGOMERY

Hyattstown

270

LITTLE SENEC

For a company serving 1.8 million customers in both Montgomery and Prince George's counties, you can imagine the area we cover is large. On this map, see if you can spy our:

VIRGINIA

### **6** Water Resource Recovery Plants Damascus, Hyattstown,

FORT WASHINGTON BRANDYWINE

HYATTSVILLE

BURTONSVILL

WASHINGTON, D.C.

ANP

HARBOR

FILTER

MAC

TO THE

CHESAPEAKE

TREATMENT Piscataway

Parkway, Piscataway, Seneca and Western Branch. All together, they treat 70 million gallons of wastewater each day.

**4** Maintenance Depots Anacostia, Gaithersburg, Lyttonsville and Temple Hills

**3** Reservoirs Little Seneca, Rocky Gorge and Triadelphia, which hold a combined total capacity of 14 billion gallons. **2** Water Filtration Plants Patuxent and Potomac

**1** Blue Plains Advanced Wastewater Treatment Plant

Although operated by DC Water, the plant handles up to an additional 169 million gallons per day. This plant treats about 65 percent of WSSC's wastewater each year.

Note: WSSC's service area does not include Washington, D.C. and Virginia.

### All About Water Towers

Have you ever seen a water tower sitting high above your town and wondered what it does? Water towers not only store water, but also help make sure water flows from your faucets.

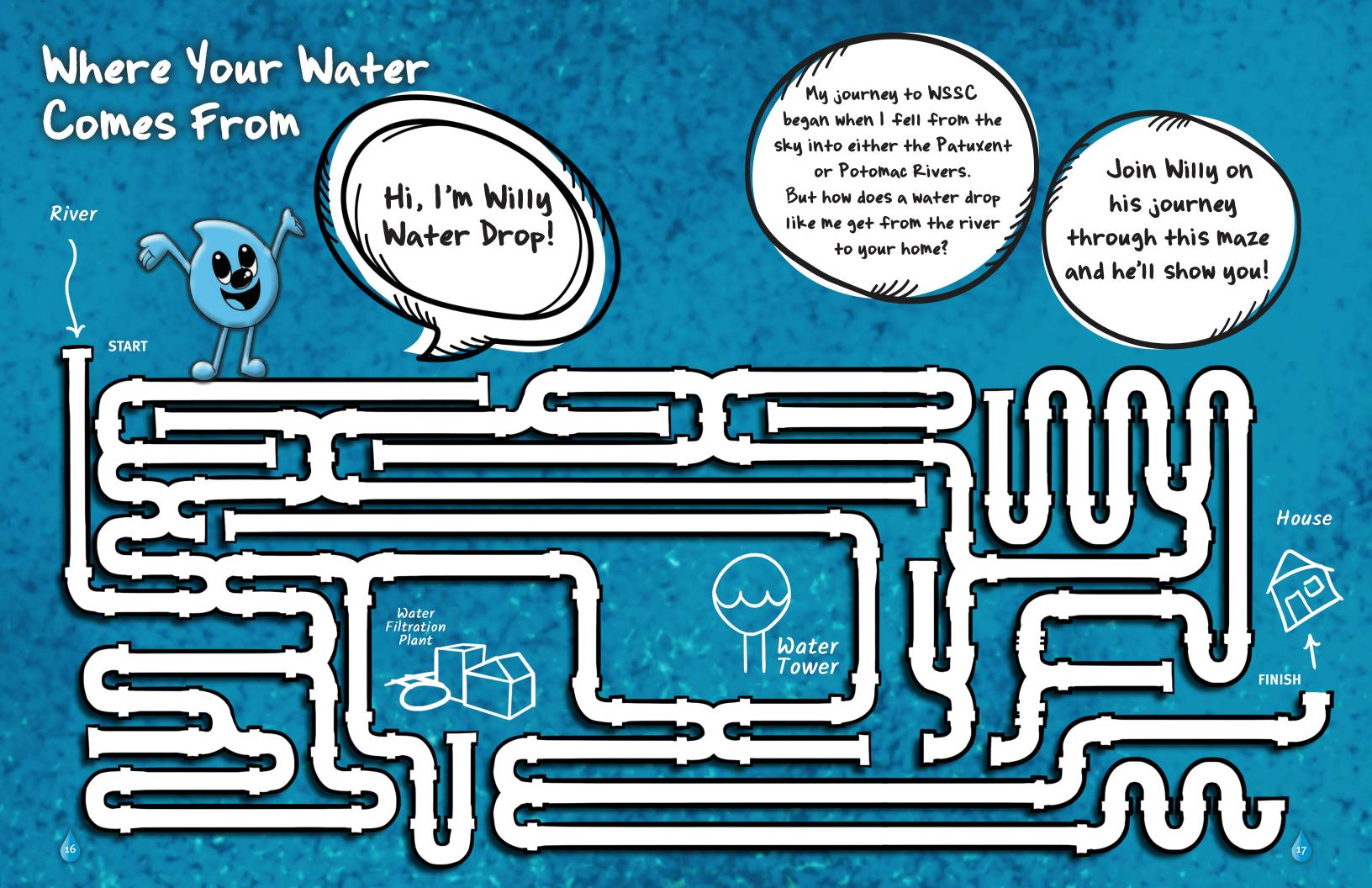
Water moves down a large pipe from the tower and then through underground pipes that go to your house. Gravity helps the water flow from the tower to supply water, even when the power goes out.

Water towers provide pressure for the water pipes in your community, helping us maintain high water quality standards. That pressure is really important for things like fire hydrants because, without it, firefighters wouldn't have the water they need to fight fires.

Most water towers are painted solid colors, like blue, but in Montgomery County, there is a water tower painted to look like the Earth!

Color In Montgomery County's Earthoid Water Tower!





## Protect Your Pipes

Whenever you flush your toilet, run water in your sink or drain the bathtub, that water travels from your home through sewer pipes to one of our water resource recovery facilities. Those are the plants where we clean wastewater.

Fats, oils and grease – even salad dressing, gravy and peanut butter -clog pipes. Hot grease hardens as it

cools, creating a big clogging mess. Can the Grease; pour grease into a can, put

a lid on it and let it cool. When the can

trash can, but that's not good. Certain

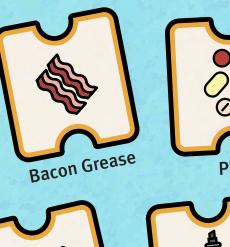
materials do not break down in water

is full, throw it in the trash.

and clog the sewer pipes.

Some people use their toilet as a







Trash

for the answers to this game.





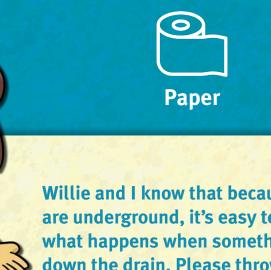


Willie and I know that because pipes are underground, it's easy to forget what happens when something goes down the drain. Please throw your trash in the trashcan or recycling bin and Can the Grease to help keep our pipes safe.

Only Flush the 3 P's

Pee

Poop



### Where to Throw What

### Draw a line from the item to where it should be thrown away.

WSSC turned 100 in 2018! That's a big deal because not many companies have been in business for 100 years.

WSSC has gone from wooden pipes to solar power, from 30,000 customers to 1.8 million. A lot has changed since WSSC first opened its doors for business in 1918.

We re 100

#### This is what we did to celebrate...

### **Centennial Saturdays**

At two of our water resource recovery facilities, customers took tours and saw how wastewater gets cleaned and returned to the rivers and streams. At our Consolidated Lab, visitors saw how we test water samples and make sure our drinking water is always clean and safe.

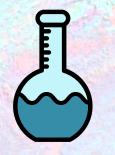
**Blue Tie Ball** In September, we held a fundraiser for WSSC's Water Fund, which provides assistance to customers who are having trouble paying their bills.

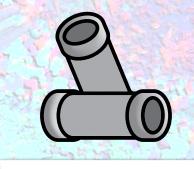
### Water Symposium WSSC's 100th birthday was May 1, 2018, On that day, we got together with other super smart water people to talk about ways to make sure we can keep delivering water for the next 100 years.

**Centennial Community Celebration** In June 2018, we invited everyone to come to our house (our headquarters building) for a day of fun and games, cool experiments and education. Kids even got to meet Willy Water Drop!



Celebrating 100 years of service was fun, but there is still lots of work to do at WSSC.





### Quality is Job #1

This past winter was very cold. Our repair crews worked many hours to fix thousands of broken pipes. In January, we fixed a record 802 water main breaks alone!

In 100 years, we've had zero water quality violations!







Visit wsscwater.com/100 to learn about our history!





These are only a few of the things we did in 2018. Visit http://info.wsscwater.com/annual-reports/2018/what-we-did.php to see a longer list of our 2018 accomplishments.

# look What We Did

### **Pipe Progress**

This year, we also replaced old pipes with:

> **53** miles of new water pipes

17 miles of new sewer pipes



#### We Get Awards

All of our water resource recovery and water filtration plants received national awards. Further proof that we do a great job of keeping the water and the environment clean.

WSSC also was nationally recognized for using solar and wind power.

#### The List Goes On

### We're excited about all we'll do over the next 100 years!

# **Innovation at WSSC**

There are always new and cool things happening at WSSC, especially when it comes to the tools and technology we use. These are just a few of the innovative projects at WSSC. To learn about more cool ideas, like Acoustic Fiber Optics that monitor the condition of our largest pipes, head over to http://info.wsscwater.com/annual-reports/2018/innovation.php

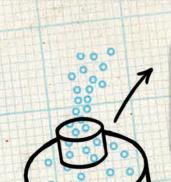
### **Poop to Power**

As funny as it sounds, we'll soon be turning poop to power. Our Bio-Energy Project at our Piscataway Water Resource Recovery Facility will create fuel from sewage. The energy from that fuel will be used to run the plant that cleans the wastewater.

By turning poop to power, we'll also be helping to keep the air and our source water cleaner. The money we're spending to build this new bio-energy facility will save us more money in the future.



Heat removes harmful bacteria and viruses from the water.



Microbes eat the solids generating renewable fuel. This fuel provides power to run our treatment plant and is better for the environment.

The rest of the water is squeezed out, leaving biosolids behind. These biosolids can help farms, forests and plants grow.

> Biosolids are the good stuff left over from the treatment process. Because they're full of nutrients, the biosolids make great fertilizer for plants.

Way back when WSSC first began, many of the pipes in the ground were made of wood. Now, pipes are made of concrete or iron.



### **Pipe Diver**

Another cool tool we use is called a Pipe Diver, which like its name says, "dives" into and travels through the inside of our pipes. The robot-like tool can see inside and tell if the pipes are in need of repair. The sooner we know that information, the better, because it helps us know to repair or replace a pipe before it breaks.

### **Zinc-Coated Pipes**

We need to be sure the pipes that deliver the water, and take away the wastewater from your home last a long time.

That's why we're installing a special kind of iron pipe that will last for 100 years or more. First sprayed with zinc coating, this pipe is then wrapped in an extra layer of protection to make it even more durable. We're proud to say that we're the first utility in the country to make this our standard pipe.

### Connect the Dots With Willy!

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