



25
Years
**OF INNOVATIVE
WATER SUPPLY
SOLUTIONS**

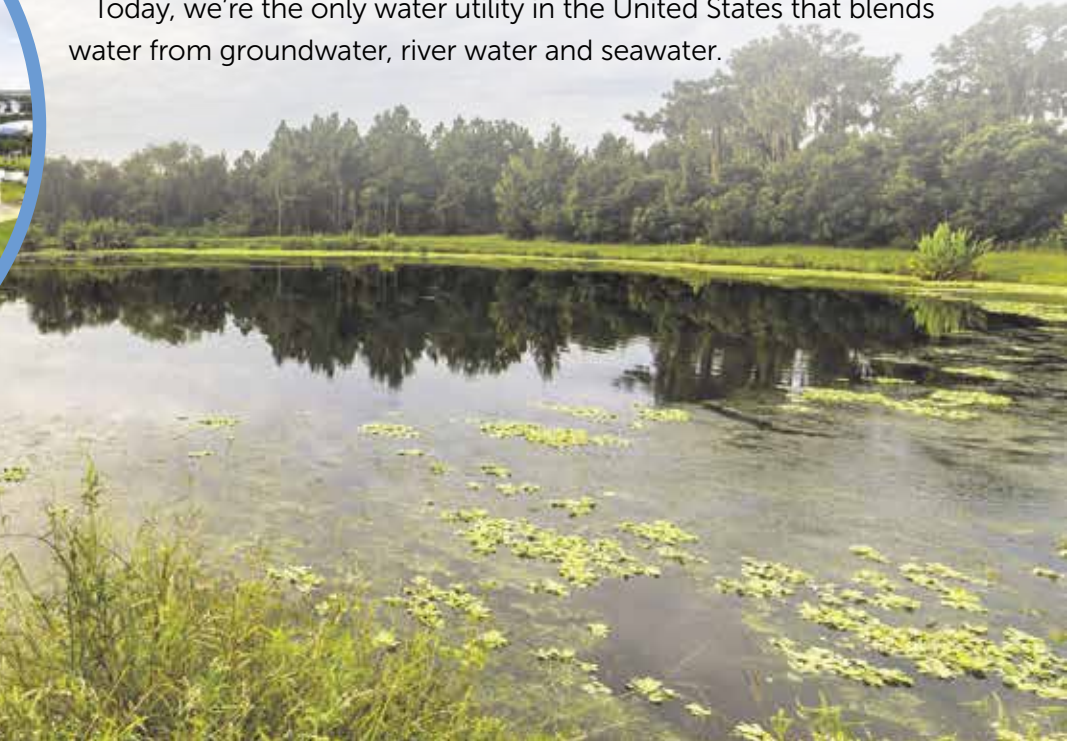
When you turn on your faucet, water flows. It seems simple, but it takes a lot of work for the water to get to the faucet and to you. For 25 years, Tampa Bay Water has delivered clean, safe, high-quality water to the Tampa Bay region. Today, the water we provide is from a sustainable mix of groundwater, river water, and seawater, but that wasn't always the case. Find out what it takes to get water from its source to your tap.

A brief history of Tampa Bay Water

Tampa Bay Water is the largest wholesale drinking water supplier in the southeast United States and provides water to Hillsborough County, Pasco County, Pinellas County, and the cities of New Port Richey, St. Petersburg and Tampa. When Tampa Bay Water was created in 1998, groundwater was the only source of drinking water in our area. Years of drought, population growth, and over-permitting of groundwater led to environmental damage; lakes and wetlands dried up.

Tampa Bay Water was formed to balance residents' needs for water with the needs of the environment. Tampa Bay Water did it by reducing groundwater by more than half, through developing other sources, such as river water and seawater. In 2002, the region's first new water source began serving the region and lakes and wetlands began to recover.

Today, we're the only water utility in the United States that blends water from groundwater, river water and seawater.



Let's start at the source

Groundwater

Groundwater is stored in the Floridan Aquifer, an underground layer of limestone that works like a sponge to store trillions of gallons of water. Groundwater is pumped from the Floridan Aquifer through wells drilled hundreds of feet into the ground. Tampa Bay Water's 12 wellfields include more than 150 wells.



River water

When available, water is skimmed from the Alafia River and Tampa Bypass Canal. Water is pumped to the Tampa Bay Regional Surface Water Treatment Plant for immediate use and to the C.W. Bill Young Regional Reservoir. The reservoir holds 15.5 billion gallons of water! It's our water piggy bank, so we can save the water and use it during dry times of the year, when it's not raining and rivers have less water flowing.



Seawater

Water from Tampa Bay is made usable by the Tampa Bay Seawater Desalination Plant. The Tampa Bay plant is the second-largest seawater desalination plant in the United States. It can provide up to 25 million gallons of water per day and is the drought-proof part of our water supply system.

GOING BEYOND THE TEXT: **Environment editorial**

Think about the importance of water to our lives and how water, the aquifer, conservation and pollution relate to the future of mankind and the quality of life. Watch the NBC Learn/National Science Foundation video series "Sustainability: Water," https://www.nsf.gov/news/mmg/index.jsp?series_name=Sustainability:%20Water

With your class, make a list of the concepts and ideas you discover. Next, in a small group, look for articles in the Tampa Bay Times about water conservation, the environment, pollution or any other topics you discussed with your class.

Based on the information you read in these articles and watched in the video, write an editorial on the importance of water in your community and to the future of mankind. Use the editorials and letters to the editor in the Tampa Bay Times as models for your article.

Florida Standards: SC.68.N.1.1; SC.68.N.1.2; SC.68.N.1.3; SC.68.N.1.4; SC.68.N.3.1; SC.712.E.6.6; SC.68.P.9.1; ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4

The water cycle

Water covers about 71 percent of Earth's surface, and oceans hold about 96.5 percent of all Earth's water. The water we see and use today is the same water that dinosaurs drank when they roamed the Earth. That's because water is constantly moving through our environment – through the air, land and bodies of water such as oceans, rivers and lakes – in a process called the hydrologic cycle, or water cycle.

The water cycle is driven by heat from the sun. The sun heats the water in rivers, lakes and oceans, causing them to change from liquid to a gas called water vapor. This is called evaporation.

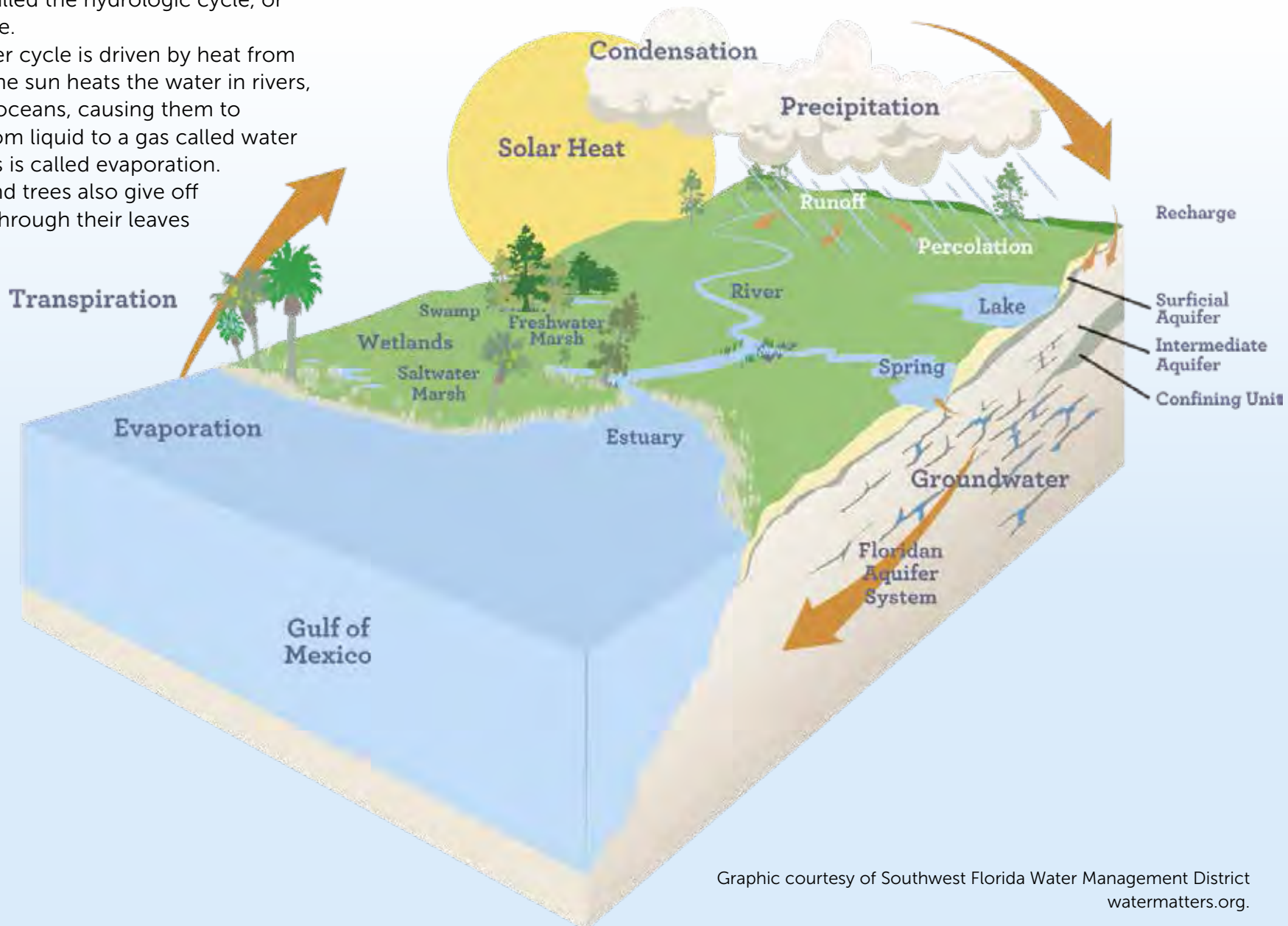
Plants and trees also give off moisture through their leaves

in a process called transpiration. The water vapor then collects into clouds and changes back into liquid water droplets in a process called condensation. When enough of these droplets form, they become too heavy to remain in the air and fall to the ground as rain, sleet or snow. This process is called precipitation.

When rain or other precipitation falls,

some of the water seeps deep into the ground and becomes groundwater in a process called percolation, while some flows over the land to larger bodies of water, like rivers, lakes and the ocean. This is called runoff.

Human activities also impact the water cycle, affecting where water is stored, how it moves, and how clean it is.



Graphic courtesy of Southwest Florida Water Management District
watermatters.org.

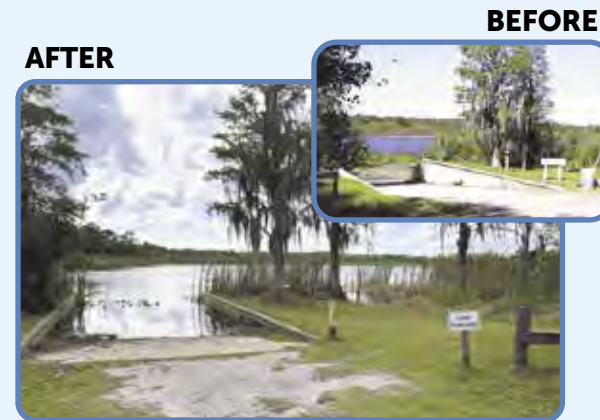
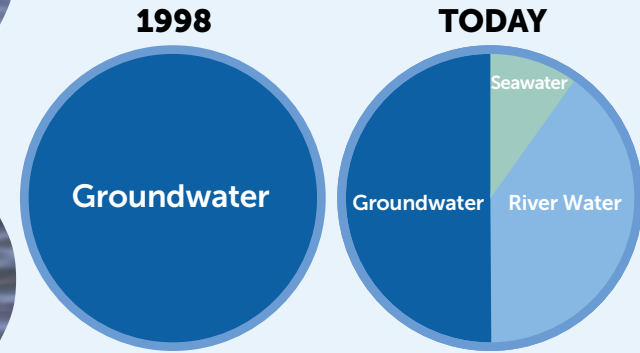
Restoring balance with the environment



Before Tampa Bay Water was created, the region used too much groundwater from the Floridan Aquifer, which caused lakes and wetlands to run dry. New water supplies in river water and seawater allowed Tampa Bay Water to continue providing drinking water to the region while cutting in half the amount of groundwater the region used. This reversed the environmental damage and those same wetlands and lakes have recovered.

Tampa Bay Water measures the water we pump from more than 150 wells and keeps track of water levels in 515 lakes and wetlands to ensure we protect the environment near our wellfields.

Today, groundwater accounts for a little more than half of the region's water supply mix. The reduction in groundwater withdrawals contributed greatly to lake and wetland recovery.



GOING BEYOND THE TEXT: **Moving water**

The world's water moves from lakes, rivers, oceans, the atmosphere and the land in an ongoing cycle called the water cycle. The water cycle describes how water evaporates from the surface of the Earth, rises into the atmosphere, cools and condenses into clouds and falls again to the surface as precipitation. Visit <https://gpm.nasa.gov/education/videos/water-cycle-animation> to watch an animation of Earth's water cycle. Next, create an artistic depiction showing the water cycle.

Florida Standards: SC.68.N.1.1; SC.68.N.1.2; SC.68.N.1.3; SC.68.N.1.4; SC.68.N.3.1; SC.712.E.6.6; SC.68.P.9.1; SC.5.E.7.1; SC.912.L.17.10; ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4

Cleaning the water



With three different sources of supply, Tampa Bay Water has three different processes to clean and disinfect drinking water. For 25 years, Tampa Bay Water has provided drinking water that meets or is better than the health-based standards established in the Safe Drinking Water Act. Water treatment plants use proven technology, advanced disinfection, corrosion control and state-certified operators to ensure a high-quality product.

Groundwater requires less treatment than river water and seawater because nature does most of the cleaning for us. The Floridan Aquifer serves as a natural filter as water moves through it, leaving only the need to disinfect and stabilize water before it blends with other sources.

The region's river water treatment plant and seawater desalination plant use multi-step processes for added safety. Both

facilities strain water to remove large debris, then use a conventional treatment

process in which chemicals are added that cause small particles to clump together and settle out.

At the **river water** treatment plant, water is disinfected using ozone, one of the most powerful disinfectants available in water treatment. The water is again filtered with biologically activated carbon and disinfected with chloramines before being blended with other sources and distributed to Tampa Bay Water's member utilities.

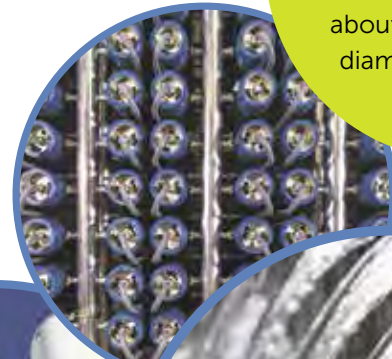
At the **seawater** desalination plant, after the conventional process, water flows through even finer filters to remove any remaining matter. Highly filtered seawater is then forced at high pressure through reverse osmosis (RO) membranes that remove salt. Chemicals are added to stabilize the desalinated seawater, which is then disinfected with chloramines before being blended and distributed to Tampa Bay Water's member governments and eventually to you.

Tampa Bay Water uses chloramines, a combination of chlorine and ammonia, as a final disinfectant because it reduces disinfection

byproducts, reduces the chlorine smell and produces better-tasting water. It is a powerful disinfectant that ensures the water stays clean and safe throughout our vast distribution network and to our most distant customers.

Did you know?

The size of each RO membrane pore is about .001 microns, which is about 1/100,000th the diameter of a human hair.



Did you know?

Ozone is a naturally occurring gas in Earth's atmosphere, and it's a powerful oxidizer.

That means it reacts with and eliminates substances in water, like bacteria, viruses and metals.



What's a chloramine?

Chloramines, or monochloramines, are used to disinfect drinking water. Chloramines are formed when ammonia is added to chlorine. Chloramines provide long-lasting protection as they do not break down quickly in water pipes.

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High-quality drinking water is our standard

Providing clean, safe drinking water is the top priority at Tampa Bay Water. The drinking water provided to our member governments meets or is better than all local, state and federal drinking water regulations.

Tampa Bay Water continuously monitors water quality through:

WATER QUALITY STANDARDS

- ~ More than 90 local, state and federal drinking water parameters
- ~ 12 additional parameters established by our member governments
- ~ 13 additional parameters under study

WATER QUALITY ASSURANCE

- ~ Tampa Bay Water collects more than 3,500 samples annually
- ~ Hundreds of regional water-quality monitoring sites
- ~ The water authority performs more than 45,000 water-quality tests annually in a state-certified laboratory



Safe Drinking Water Act

The United States Congress originally passed the Safe Drinking Water Act in 1974 to protect the nation's drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources, such as lakes, rivers, reservoirs, springs and groundwater wells.

The Safe Drinking Water Act authorizes the United States Environmental Protection Agency (EPA) to set health-based standards for drinking water to protect against both naturally occurring and man-made contaminants. It also requires utilities to treat and monitor the water to meet those standards. Visit epa.gov/sdwa to learn more.



Did you know?

Tampa Bay Water has a 25-year record of providing clean, safe water that is more strictly regulated and tested than bottled water.



GOING BEYOND THE TEXT: **Protecting our watershed**

Research the Safe Drinking Water Act and its history. Why was the law implemented? What changes were made in 1986 and in 1996? Write a report with the information you find. Note the most interesting fact that you learned and share that with your class. Explain why you found that specific information interesting. Also, be sure to note what you learned from your research.

Florida Standards: SC.5.E.7.2; SC.4.E.6.3; SC.412.N.1.1; ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4

Delivering water to you

Tampa Bay Water has more than 200 miles of pipeline. On average, our drinking water travels 20-50 miles: from the source to Tampa Bay Water's treatment plant to your utility's water treatment plant, then through many more miles of pipeline to finally reach your home.

Some parts of the system rely on gravity. For instance, Tampa Bay Water's C.W. Bill Young Regional Reservoir is elevated, and gravity lets the water flow through pipelines to the water treatment plant, as in the aqueducts of ancient Rome.

When gravity isn't enough, booster pumps help push the water through the pipelines.

DID YOU KNOW?

Tampa Bay Water's system has dozens of booster pumps throughout its water supply system, ranging in size from 100 horsepower to 3,000 horsepower; that's the difference between a motorcycle and a professional drag racer!

Water makes its way through Tampa Bay Water's system thanks to hydraulic engineering – the science of collecting, storing and transporting water. Hydraulic engineers must keep adequate

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GOING BEYOND THE TEXT: **Conservation**

Look for an article or photograph related to water conservation in current issues of the Tampa Bay Times. Are people using the water? Are they drinking it? Are they producing or enjoying it for recreation? Is the water being used conservatively or does the article or photograph show water being wasted? What can you and your family do to conserve water? Using the Letters to the Editor in the Tampa Bay Times, write a letter to the editor about the article or photograph.

Florida Standards: SC.7.E.6.6; ELA.68.C.1.3; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.4



pressure everywhere in the system at all times; even though, people use different amounts of water at different times of the day. How would that be hard? Because pipes aren't straight and aren't the same size or age. Pipeline sizes vary, some connecting to larger pipes and others connecting to smaller pipes. Also, there are turns in the pipes, as well as the amount of pressure in the pipeline.

Using water

to water use and/or a Bay Times. How are you using it for industrial water being used? Graph suggest the water family do to help conserve. Tampa Bay Times as this issue.

ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.F.2.2; ELA.68.F.2.3;

WATER PRESSURE BY THE NUMBERS

Water pressure is commonly measured in pounds per square inch (psi).



AVERAGE GARDEN HOSE

50 psi



WATER PRESSURE IN TAMPA BAY WATER'S PIPELINES

50-150 psi



TYPICAL FIRE HOSE

200-275 psi



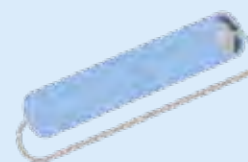
PRESSURE WASHER

1,000-4,000 psi



COIN-OPERATED CAR WASH SPRAY NOZZLE

700 psi



DESALINATION REVERSE OSMOSIS PRESSURE

1,000 psi

You, too, can help protect our water

Now you know your drinking water comes from the Floridan Aquifer, rivers and even Tampa Bay. For the past 25 years, Tampa Bay Water has worked hard to provide clean, high-quality water while protecting water sources and promoting environmental recovery. You can help, too.



We all live in a **watershed** and everything we do *on land* can affect the health and well-being of our **surrounding water bodies**.

What you do in and around your home and in your community **impacts our watershed**. We all **share the responsibility** so we can all make **simple changes** to help **prevent pollution** and promote a **healthy watershed** for all of us.

Know your watershed

A watershed is an area of land that drains or “sheds” to a common body of water. Everywhere is a watershed. That’s why it’s so important to protect our drinking water sources from contamination. Surface waters, like Tampa Bay and area rivers and streams, are especially vulnerable to contaminants. Everything that happens on the ground can make its way to the water.

When it rains, trash and other materials get washed into surface waters. This pollution not only hurts the creatures and plants living in these waters, but it also impacts our drinking water sources.

Protecting these sources from contamination protects your drinking water, the environment, and saves money and energy. The cleaner the source water, the less cleaning that’s required — which means less energy and chemicals are needed to clean the water.

GOING BEYOND THE TEXT:

Protecting our watershed

Look in the Tampa Bay Times to find at least five images or stories that show or tell about a situation in which the watershed or ecosystem may be harmed. Write a description of each of the situations you find and identify how the watershed or ecology could be harmed. Are there laws against the situation presented? If so, are there penalties?

Florida Standards: SC.5.E.7.2; SC.4.E.6.3; SC.412.N.1.1; ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4



It's everyone's job to protect Florida's waterways.

Graphic courtesy of Pinellas County Communications

Six easy ways to keep source water clean

1

Put trash in the proper place

Whether it's the trash can or recycle bin, put trash where it belongs. Plastic does not decompose and can harm many animals and fish as well as pollute the water.

2

Reduce the amount of trash you produce

Single-use products such as grocery bags, straws and water bottles may make life easier but can also harm our environment. Switch to reusable products that are designed to last!

3

Safely dispose of household pollutants

Tell your parents or guardians that old paint, motor oil and household chemicals don't belong in the household garbage. These can be recycled at your local County Collection Center for free.

4

Properly dispose of old medicines

Remind your parents or guardians to take old medicine to approved Sheriff's Office drop-off sites. This is also a free service.

5

Scoop the poop!

One ounce of dog poop contains 23 million microorganisms of fecal coliform bacteria and can add nutrients to our waterways that cause algae growth. Always pick up after your pet and put it in the garbage.

6

Use Florida-friendly fertilizer

Tell your parents or guardians to use slow-release fertilizer on the lawn. Watch the weather and never fertilize before rain. Rain can wash excess fertilizer into bodies of water and cause harmful algae blooms.



GOING BEYOND THE TEXT: Scoop the poop

Do the math: If the average-size dog produces $\frac{1}{2}$ pound of poop each day and there are 500,000 dogs in the Tampa Bay area, how many total pounds of dog poop is produced each day? Each week? Convert both answers to tons. If 40 percent of dog owners don't pick up after their pets, how much dog poop is left on the ground each day?

Now that you know surface waters are vulnerable to contaminants, what happens to this poop that is left on the ground each day? Look in the Tampa Bay Times for articles about groundwater pollution. In addition, do research about this issue on the Internet. Use what you read to write a short editorial explaining how big the problem is and what residents can do about it. Use the editorials, columns and opinion articles in the Times as models.

Florida Standards: ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4; MA.68.AR.3.1; MA.68.A

BE WATER WISE

Remember, Earth has only so much water. Conservation is key to making sure we all have enough. As you go about your day, think about how much water you can save if you use only what you need.

INSIDE YOUR HOME

Older dishwashers use 10-15 gallons per load; newer water-efficient dishwashers use 4-7 gallons.

TIP: Only run the dishwasher when you have a full load.



Brushing teeth uses about 2 gallons per minute.

TIP: Don't let the water run while you brush your teeth.



Washing laundry uses 20-45 gallons of water per load. High-efficiency clothes washers use 14-25 gallons per load.

TIP: Only run the washer with a full load.



Showers use about 2 gallons a minute, or 16 gallons for the average 8-minute shower.

TIP: Shorten your shower to 5 minutes and use only 10 gallons per shower.



Toilets use about 2.6 gallons per flush.

TIP: Tell your parents to replace old toilets with new EPA WaterSense labeled toilets.



AT SCHOOL

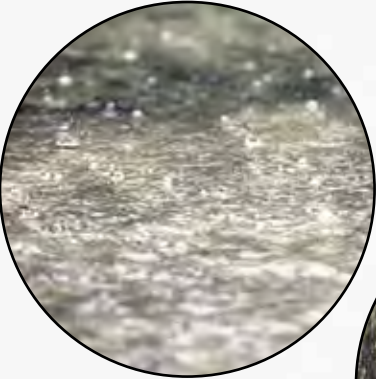
You use about 10-12 gallons of water at school by using the toilet, washing your hands and drinking from the water fountain.

Tampa Bay Water Wise is a conservation program for residents in Tampa Bay. The program offers rebates for water-saving fixtures for residents, businesses, contractors and builders in the counties served by Tampa Bay Water. Tell your parents or guardian to visit tampabaywaterwise.org to learn more.

TAMPA BAY
water wise

Water's incredible journey

How does water go from source to your tap? Let's retrace water's incredible journey.



Rainfall

Rain falls on Hillsborough, Pasco and Pinellas counties, where it seeps into the ground; fills rivers, lakes and wetlands; or ends up in the waters of Tampa Bay.



Water sources

A variety of water sources ensures a diverse, reliable water supply network and promotes a healthy environment.



Cleaned for drinking

Water is pumped to treatment plants, where it is cleaned with proven technology and advanced disinfection. Tampa Bay's drinking water meets or is better than all federal, state and local drinking water standards.



Delivery

After being cleaned and blended, the safe, high-quality water is pumped to local utilities that treat and monitor the water until it reaches homes and businesses.



At your home

High-quality drinking water is delivered to you, available with the turn of a faucet handle.

GOING BEYOND THE TEXT: Cause and effect

Waste can result in a shortage of natural resources, including water. Wasting resources is increasing at an alarming rate in the world and in our neighborhoods. Waste can be the result of carelessness or convenience. Look for an article in the Tampa Bay Times that focuses on waste. Discuss the article with your class. Write down the main points presented in the article. Discuss the ways you can offset this problem. As a class, write down the steps you can take to offset the problem. Then break into small groups and create a poster outlining those steps to share with others.

Florida Standards: ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4

Dive into a career in water

The people who work at Tampa Bay Water make a difference in the community. From building pipelines and facilities to testing water or communicating with the public, career opportunities are available for all education levels and areas of interest.

HIGH SCHOOL DIPLOMA / VOCATIONAL TRAINING / SOME COLLEGE

BOOKKEEPER

Average Annual Salary: \$48,000 to \$78,000

Education: Associate degree with an emphasis in accounting, finance or business administration; supplemented by three years of experience; or a high school diploma supplemented by six years of experience.

Description: Manages money moving into, through and out of the organization; prepares financial reports and coordinates payroll.

CAD DESIGNER

Average Annual Salary: \$40,000 to \$60,000

Education: High school diploma, on-the-job training or associate degree in drafting.

Description: Uses computers to prepare design drawings and charts; prepares maps of an area showing distribution facilities; creates and updates plot books, charts, graphs and contract designs.

MAINTENANCE TECHNICIAN

Average Annual Salary: \$44,000 to \$71,000

Education: Associate degree in mechanical, electrical or industrial maintenance.

Description: Maintains, troubleshoots and repairs equipment according to safety, predictive and productive maintenance systems and processes.



RECORDS TECHNICIAN

Average Annual Salary: \$35,000 to \$45,000

Education: High school diploma.

Description: Performs administrative duties for managing records, archives, public records requests and other related inquiries.

WATER TREATMENT PLANT OPERATOR

Average Annual Salary: \$40,000 to \$58,000

Education: High school diploma, may require associate degree or technical certificate.

Description: Operates equipment that controls water treatment processes; monitors the treatment process and maintains operation logs; collects water samples and records various readings.



FOUR-YEAR DEGREE/HIGHER EDUCATION

LAB TECHNICIAN

Average Annual Salary:
\$41,000 to \$78,000

Education: Associate or bachelor's degree in laboratory science and on-the-job training.

Description: Conducts chemical and biological tests to measure water quality, monitor disinfectant levels; records findings.



plants and other water supply and delivery facilities. Hydraulic specialty may require additional coursework.

ENVIRONMENTAL PLANNER

Average Annual Salary: **\$64,000 to \$103,000**

Education: Bachelor's or graduate degree in environmental engineering, urban planning, public policy, public administration, economics, and physical or natural sciences.

Description: Plans, prepares, and monitors environmental research and evaluates potential environmental impact of projects. Ensures environmental projects comply with state and federal regulations.

CONSTRUCTION MANAGER

Average Annual Salary: **\$86,000 to \$135,000**

Education: Bachelor's degree in engineering or related field.

Description: Oversees the entire construction process; reviews plans, oversees schedule and budget; manages workflow and ensures work meets contractual requirements.

ENGINEER

Average Annual Salary:
\$64,000 to \$103,000

Education: Bachelor's degree in engineering and Professional Engineer (P.E.) license.

Description: Designs and engineers dams, reservoirs, pumping stations, pipelines, water treatment



WATER CONSERVATION SPECIALIST

Average Annual Salary:
\$61,000 to \$98,000

Education: Bachelor's degree in natural or physical science, environmental or civil engineering, economics, urban or regional planning or public administration.

Description: Uses water conservation expertise to calculate water savings of large conservation programs; helps forecast short-term and long-term water supply and demand; recommends ways that businesses, agriculture and consumers can save water; helps create and promote conservation regulations.



COMMUNICATIONS COORDINATOR

Average Annual Salary: **\$44,000 to \$71,000**

Education: Bachelor's degree in communications, journalism or related field.

Description: Communicates with customers about water quality and conservation; produces news releases, brochures and newsletters; schedules and conducts facility tours; creates and participates in special events.

WATER RESOURCES SYSTEM ENGINEER

Average Annual Salary: **\$71,000 to \$114,000**

Education: Master's degree in water resources engineering or closely related field with one-year post-master's experience.

Description: Performs scientific modeling of river and groundwater systems. Makes predictions to support supply and demand decisions; and participates in planning for future water needs.



GOING BEYOND THE TEXT: **Working together**

We all need to work together to protect our environment. Conserving water, recycling and protecting our wildlife are important for the future of Earth. Look for articles in the Tampa Bay Times that show or focus on examples of people, groups or organizations that are working to protect the environment. Make a list of those involved and the actions they are taking. Select one of the environmental groups or issues you have read about and do some research about it. Then think about what actions you can take to protect the environment. Share your ideas and what you have learned by writing a blog post or short essay that incorporates the information you have learned.

Florida Standards: SC.7.E.6.6; SC.7.E.7.2; SC.68.E.7.1; SC.69.P.8.2; ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4

Learn more about the water around you

Visit tampabaywater.org to:

- ~ Request a speaker for your classroom.
- ~ Book a tour of Tampa Bay Water's facilities.
- ~ Learn about source water protection and conservation.
- ~ See the blend of water you're drinking.
- ~ See how much water is stored in the regional reservoir.
- ~ Find your watering days.

About Tampa Bay Water

Tampa Bay Water supplies wholesale drinking water to Hillsborough County, Pasco County, Pinellas County, New Port Richey, St. Petersburg and Tampa. We supply water to more than 2.5 million people through the governments we serve.



**TAMPA
BAY
WATER**
Supplying Water To The Region

Visit the Glazer Children's Museum for hands-on learning

Experience Tampa Bay Water's interactive water exhibits as part of Water's Journey at the Glazer Children's Museum including:

- ~ **Water Climber:** You become a drop of water in the water cycle.
- ~ **Your Tampa Bay Water:** Water treatment in action! Turn levers, push buttons and follow the journey that water takes to get to your house.
- ~ **The Ocean Sandbox:** An augmented reality environment controlled by you.
- ~ **Educational kiosks:** Featuring the voices and ideas of local students.



About NIE

The Tampa Bay Times Newspaper in Education program (NIE) is a cooperative effort between schools and the Times Publishing Co. to encourage the use of newspapers in print and electronic form as educational resources — a "living textbook."

Our educational resources fall into the category of informational text, a type of nonfiction text. The primary purpose of informational text is to convey information about the natural or social world. NIE serves educators, students and families by providing schools with class sets of the Pulitzer Prize-winning Tampa Bay Times plus award-winning original educational publications,



teacher guides, lesson plans, educator workshops and many more resources — all at no cost to schools, teachers or families.

In 2022-2023, NIE provided more than 200,000 print copies and nearly 10 million e-Newspaper licenses to Tampa Bay classrooms. For more information about NIE, visit tampabay.com/nie, call 727-893-8138 or email ordernie@tampabay.com. Follow us on X, formerly known as Twitter, at twitter.com/TBTimesNIE. Find us on Facebook at facebook.com/TBTNIE.

NIE staff

Jodi Pushkin, manager, jpushman@tampabay.com
Sue Bedry, development officer, sbedry@tampabay.com

Educational activities written by: Jodi Pushkin, Times staff

Designed by: Stacy Rector, Fluid Graphic Design, stacyrector1@comcast.net, fluidgraphicdesign.com

Florida Standards

Science: SC.68.N.1.1; SC.68.N.1.2; SC.68.N.1.3; SC.68.N.1.4; SC.68.N.3.1; SC.712.E.6.6; SC.68.P.9.1; SC.5.E.7.1; SC.5.E.7.2; SC.4.E.6.3; SC.68.L.17.10; SC.7.E.6.6; SC.68.P.8.2; **Language Arts:** ELA.68.C.1.3; ELA.68.C.1.4; ELA.68.C.2.1; ELA.68.C.3.1; ELA.68.C.4.1; ELA.68.R.2.2; ELA.68.R.2.3; ELA.68.R.2.4; ELA.68.V.1.1; ELA.68.V.1.3; ELA.68.F.2.1; ELA.68.F.2.2; ELA.68.F.2.3; ELA.68.F.2.4 **Mathematics:** MA.68.AR.3.1; MA.68.AR.3.4