March 19th, 2026

City of Edgewater
City Hall
104 North Riverside
Edgewater, Florida 32132

Dear Mayor and City Council Members,

On behalf of WateReuse Florida, the Florida Section of the WateReuse Association, we would appreciate the opportunity to share information with you regarding potable reuse and aquifer recharge using highly treated reclaimed water. WateReuse Florida is a statewide, nonprofit organization comprised of utilities, engineers, scientists, regulators, and water resource professionals dedicated to advancing the safe, sustainable reuse of water. Our members represent county and municipal utilities, water management districts, environmental organizations, academic institutions, and private sector experts who share a common goal: protecting Florida's water resources while ensuring reliable drinking water supplies for our communities.

We understand that the City of Edgewater is currently considering an ordinance that would prohibit potable reuse and aquifer replenishment using purified reclaimed water within your service area. We respect the important responsibility of local governments to safeguard public health and environmental resources. In the spirit of supporting informed decision-making, we offer the following information regarding the history, safety, and role of potable reuse as a water supply strategy.

Potable reuse is not a new or experimental concept. For decades, communities across the United States and around the world have safely implemented potable reuse as part of their water supply portfolios. The practice involves advanced treatment processes that purify water to extremely high standards—often exceeding those applied to traditional drinking water sources—before it is returned to a drinking water supply either directly or indirectly.

One of the earliest examples of potable reuse in the United States is the Montebello Forebay Groundwater Recharge Project in Los Angeles County, California, which has been successfully and safely replenishing groundwater supplies with highly treated reclaimed water since the

1960s. In Virginia, the Hampton Roads Sanitation District's SWIFT Program plans to produce 100 million gallons per day of potable water from highly treated wastewater that is purified to drinking-water standards and then injected into the Potomac Aquifer to replenish groundwater supplies, reduce wastewater discharges to Chesapeake Bay, and mitigate saltwater intrusion. Texas communities such as Wichita Falls have implemented direct potable reuse during drought emergencies, demonstrating the technology's reliability and effectiveness, and El Paso Water is currently constructing the Pure Water Center, an advanced purification facility that will treat wastewater and produce up to ten million gallons per day of highly purified potable water.

Globally, potable reuse has also proven to be a safe and effective water management strategy. Countries such as Singapore, Namibia, and Australia have implemented advanced water purification programs that provide high-quality drinking water supplies to millions of people. These projects have been operating safely for years and demonstrate how advanced treatment technologies can help communities maintain resilient water supplies under conditions of growth and climate variability.

Across Florida, there are a multitude of well-established and vetted projects which demonstrate the safety and reliability of utilizing reuse water to augment our potable water supplies. For example, operating since the mid-1980s, the Orange County/City of Orlando jointly owned Water Conserv II facility is one of the largest and longest-running reuse projects in the United States, providing highly treated reclaimed water to recharge the Floridan Aquifer through rapid infiltration basins, demonstrating decades of safe groundwater augmentation. Hillsborough County Public Utilities operates the Southeast Hillsborough Advanced Reuse Program (SHARP) which produces highly treated reclaimed water for direct recharge of the Floridan Aquifer and mitigation of saltwater intrusion. Gainesville Regional Utilities runs the Advanced Water Reclamation Facility Recharge Project which uses treated reclaimed water to provide groundwater recharge via man-made wetlands. Collectively, Florida utilities have successfully conducted more than a dozen potable reuse pilot or demonstration projects across the state, all utilizing advanced, multi-barrier treatment technologies—including microfiltration, reverse osmosis, ozonation, advanced oxidation technology, granular activated carbon, and ultraviolet disinfection—to demonstrate that advanced purified water can safely supplement drinking water supplies.

More recently, JEA has undertaken construction of its one million-gallon-per-day H2.O Purification Center in Jacksonville which will purify reuse water to drinking water standards and provide aquifer replenishment via well injection. Another example of indirect potable reuse that is currently under construction is Palm Beach County's Green Cay Reclaimed Water Project, which will treat two million gallons per day of reuse water using advanced purification technology to recharge regional groundwater supplies via nearby lakes at Green Cay Park.

Like many other states, Florida has adopted regulatory frameworks that allow potable reuse projects under rigorous treatment, monitoring, and oversight standards. Careful evaluation of potable reuse was undertaken by the state's Potable Reuse Commission (PRC) and led to

subsequent rulemaking by the Florida Department of Environmental Protection (FDEP). The PRC brought together a diverse cross-section of stakeholders to evaluate the potential role of potable reuse in Florida's water future. Participants included representatives from water utilities, environmental organizations, the agricultural community, the Florida Department of Health, academia, and water management districts. After extensive review and discussion of treatment processes and water quality data, the commission unanimously concluded that potable reuse can be a safe and viable water supply option when implemented under robust regulatory oversight and sound scientific principles. In 2020, the PRC released a report of its findings to the Florida legislature and state agencies. FDEP then began an intense, five-year long public rulemaking process which, at its center, prioritized the protection of human health via robust design, permitting, and monitoring requirements. Florida's statewide potable reuse rules were then adopted in February of 2025.

This discussion is particularly important in the context of Florida's growing demand for water. Our state continues to experience rapid population growth, and this growth places increasing pressure on freshwater aquifers, springs, rivers, and wetlands. Protecting these natural systems while ensuring reliable water supplies will require a diverse portfolio of water management strategies. Water conservation, traditional water sources, reclaimed water, aquifer recharge, and—where appropriate—potable reuse are all tools that may be needed to support sustainable water management and protection of the natural environment.

The State of Florida has also taken legislative action that affects how utilities manage treated wastewater. During the 2021 legislative session, the Florida Legislature adopted Senate Bill 64, which addresses wastewater management and environmental protection. Among other provisions, the law establishes requirements to reduce and eventually eliminate certain discharges of treated wastewater to surface waters, including through ocean outfalls and other disposal practices. These requirements place increasing responsibility on utilities to find beneficial and environmentally protective uses for highly treated effluent. The deadline to comply with the requirements of Senate Bill 64 is 2032.

As utilities evaluate strategies to comply with these mandates, they must consider a range of options that may include potable reuse, aquifer recharge, and advanced treatment technologies. A local ordinance that prohibits potable reuse or the use of highly treated reclaimed water for aquifer replenishment would significantly limit the range of available solutions that utilities may rely upon to meet the state's requirements. While potable reuse is not mandated by the State of Florida, it is recognized as one of several tools that communities may consider when developing long-term water supply and wastewater management strategies.

For this reason, we respectfully encourage consideration of the long-term implications of prohibiting these practices outright. Water management challenges evolve over time, and future community leaders will face conditions that are difficult to predict today. Preserving flexibility within the suite of water management options allows municipalities and counties to adapt to changing circumstances while continuing to protect public health and environmental resources.

WateReuse Florida stands ready to serve as a resource to your community as you consider these important issues. Our members include many of the state's leading experts in water utilities, water treatment, public health protection, and water resource management, and we would welcome the opportunity to provide additional information, technical resources, or dialogue should it be helpful. In the meantime, we have included some fact sheets regarding potable reuse and encourage you to visit the WateReuse Association's website at https://watereuse.org/educate/ should you like additional information.

Thank you for your time, your leadership, and your continued commitment to protecting Florida's water resources for current and future generations.

Sincerely,

Kerry Kates, P.E.
President
WateReuse Florida
FLPresident@watereuse.org

Enclosures:

1. Profiles in Reuse: Florida
2. Profiles in Reuse: Potable Reuse

PROFILES IN REUSE: Florida

WateReuse

The amount of water on Earth does not change—all water has been recycled naturally since the beginning of time.

While nearly 70% of the planet is covered by water, only 2.5% is freshwater, and only 1% is accessible to humans. Water reuse, also known as water recycling, is the process of intentionally capturing wastewater, graywater, stormwater, or saltwater and cleaning it for a designated beneficial freshwater purpose. Common uses for recycled water include drinking, irrigation, industrial processes, groundwater replenishment, and environmental restoration.

WHY INVEST IN WATER REUSE?

Floridians use nearly 6.4 billion gallons of water per day. With an estimated 1,000 people moving to the state daily, residents are projected to use an additional 1 billion gallons per day by 2040. Florida also welcomes an average of 350,000 visitors each day. Expanding the use of recycled water is one way to help ensure there is plenty of water to meet growing demand. Reusing water also relieves pressure on Florida's already stressed aquifers, water resources, and ecosystems, keeping water in rivers and springs for the plants and wildlife that rely upon them.

WATER REUSE IN FLORIDA

Florida's first reuse system began operating in Tallahassee in 1966. Today, Florida has more than 380 systems supplying more than 900 million gallons a day of beneficial reuse. Reclaimed water is used to irrigate over 6,000 acres of edible crops, over 500 golf courses, and for more than 1,000 schools and 500,000 residences. It is also used for industrial purposes such as cooling towers and power plants. As of 2023, Florida has an average reuse rate of 34% compared to the national average of 7%.

THE FUTURE OF REUSE IN FLORIDA

In the early 2020s, Florida invested in an unprecedented statewide education campaign called One Water Florida. A collaboration of the Florida Department of Environmental Protection (FDEP), the state's five water management districts, WateReuse Florida, utilities, and other stakeholders, the campaign unified outreach efforts about a safe and reliable future with potable reuse.

In 2025, FDEP adopted new rules governing both direct and indirect potable reuse, paving the way for new sustainable water projects across the state. More than a dozen communities have already launched potable reuse pilots and demonstration facilities across the state.

RECYCLED WATER IS:

COST EFFECTIVE
Reusing water can be more cost effective than other alternative supplies.

ENVIRONMENTALLY SOUND
Reusing water alleviates pressure on Florida's freshwater sources and natural systems.

SAFE
Water is treated to meet Florida's stringent state and federal water quality standards.

RELIABLE
Because wastewater is renewable, water reuse is the only sustainable source of freshwater.

SUSTAINABLE
Florida's communities that use recycled water utilize regional resources to increase the sustainability of the water supply.

WATER REUSE IN FLORIDA

MODELING
the Future

Florida is home to **over a dozen indirect and direct potable reuse pilots and demonstration facilities** across the state.

BRINGING BACK
Groundwater

Pasco County's 167-acre constructed wetland system fills up with **5 million gallons of recycled water each day**. The 15 wetland cells recharge groundwater levels affected by historical overuse and ensure a sustainable water supply for the Tampa Bay region.

POWERING
Our Community

Tampa Electric's Polk Power Station uses **7 million gallons per day of reclaimed water** from Polk County and the cities of Lakeland and Mulberry to cool its two massive combined-cycle units. The project also reduces surface water discharges and nitrogen levels in the Alafia River and Tampa Bay.

1,000 MILES
of Pipe

Pinellas County and the City of St. Petersburg, along with many of the county's municipalities, have long been reuse leaders in the state with an extensive system of reclaimed water pipes.

Irrigating More Than
2,700 ACRES
of Citrus

Water Conserv II is the largest project of its kind in the world, eliminating surface water discharges by combining agricultural irrigation and rapid infiltration basins. Reclaimed water from the City of Orlando and Orange County has kept **citrus crops growing for over 30 years**.

A SHIELD
Against the Sea

Hillsborough County's innovative SHARP projects inject more than **20 million gallons per day of highly treated reclaimed water** into the aquifer along the coast to create a saltwater intrusion barrier that protects and recovers the region's freshwater aquifer resources.

ONE WATER
Many Solutions

Plant City's McIntosh Preserve project uses highly treated recycled water for a variety of uses, including environmental enhancement, groundwater replenishment, potable water supply, downstream water quality improvement, and flood control, providing the community a safe, reliable, and local water supply.

FILLING
Your Bowl

Pompano Beach is home to the only water reuse system in Florida approved to irrigate salad crops that will not be peeled, skinned, cooked, or thermally processed. The project puts fresh greens on the table and protects precious water resources.

About the WateReuse Association

The WateReuse Association is the nation's only trade association solely dedicated to advancing laws, policy, funding, and public acceptance of recycled water. WateReuse represents a coalition of utilities that recycle water, businesses that support the development of recycled water projects, and consumers of recycled water. WateReuse engages on national and international water reuse issues, as well as local issues through state and regional sections. To learn more, visit **www.watereuse.org**.

PROFILES IN REUSE:
Potable Reuse

WATEREUSE

The amount of water on Earth does not change - through nature all water has been recycled since the beginning of time.

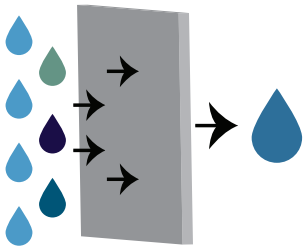
While nearly 70 percent of the planet is covered by water, only two and a half percent is freshwater, and only one percent is accessible. Water reuse, also known as water recycling, is the process of intentionally capturing wastewater, stormwater, saltwater or graywater and cleaning it for a designated beneficial freshwater purpose such as drinking, industrial processes, surface or ground water replenishment, and watershed restoration.

WHAT IS POTABLE REUSE?

Potable reuse refers to recycled water people can drink. The water produced through a potable water reuse treatment process is commonly referred to as **purified water**. Wastewater travels through sewers and pipelines to community wastewater treatment plants. There, it is either cleaned to a level where it is safe to return it to the environment, cleaned further to be used for non-drinking applications, or sent to a water purification facility for additional cleaning to be used for drinking. Saltwater and stormwater can also be recycled for drinking.

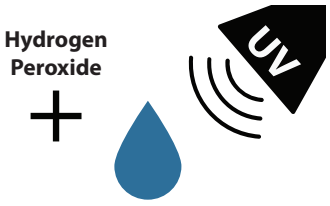
Advanced Water Purification Technology

Multi-stage purification begins with treated wastewater that is already clean enough to return to the environment and transforms it into a safe, reliable drinking water supply. Water passes through a series of cleaning processes referred to as **filtration** and **disinfection**, which produce water of the highest quality.



Filtration

Advanced water purification begins with multiple filtration technologies. Granulated Activated Carbon, for example, removes dissolved chemicals, while membrane filters remove microscopic organisms such as protozoa, bacteria, viruses, and minute concentrations of other constituents.



Disinfection

Advanced disinfection technologies remove any organic particles that remain after filtration. One method destroys these residuals with ultraviolet light and hydrogen peroxide. Other processes use ozone gas or chlorine.

The combination of filtration and disinfection provides robust and redundant treatment. Purified water is rigorously tested and monitored daily. It consistently meets or exceeds all public health standards.

Purified water enters a community's distribution system in multiple ways. It can be blended with other environmental systems such as a river, reservoir, or groundwater basin, or distributed directly into a drinking water supply system. In most communities, purified water goes to a drinking water plant prior to being sent to homes and businesses.

WHY POTABLE REUSE?

Communities choose purified water for drinking water for many reasons, including:

SAFE, RELIABLE AND SUSTAINABLE WATER SUPPLY

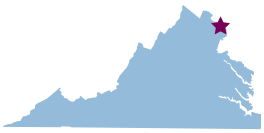
Potable reuse uses proven technology to purify recycled water to provide a safe drinking water source that is independent of climate or weather.

ENVIRONMENTAL BENEFITS

Potable reuse allows us to leave more water in rivers, lakes and streams for fish, plants and wildlife, while reducing nutrient loads to these water bodies and the ocean.

Example Potable Reuse Projects

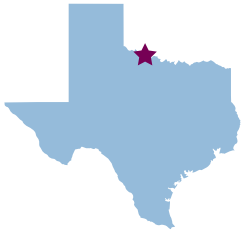
Today's technology allows us to treat any water to meet freshwater needs including drinking. Many communities have operated potable reuse projects for years. Below are just a few examples:



Upper Occoquan Service Authority (UOSA), Fairfax, VA

In service since 1978, UOSA is the longest operating potable reuse project in the United States. Recycled water is added to the Occoquan Reservoir where it blends with existing surface water. The reservoir supplies water to the Fairfax County Griffith Drinking Water Plant where it is treated to drinking water standards and distributed to approximately 321,000 people. In drought years, up to 80 percent of the total reservoir water pumped to the drinking water treatment plant may be recycled water; in normal years, it is less than 20 percent.

Cleaned Wastewater	Media	Granulated Activated Carbon	Chlorine
	Filtration	Filtration	Disinfection



Wichita Falls, TX

Because of severe drought in the 1990s, Wichita Falls constructed an interim potable reuse project that purified wastewater and piped it directly to the Cypress Water Treatment Plant, which cleaned the water again before it was distributed to customers. Since then, Wichita Falls developed a potable reuse system that purifies water and stores it in Lake Arrowhead.

Cleaned Wastewater	Membrane: Microfiltration	Membrane: Reverse Osmosis	Ultraviolet Light
	Filtration	Filtration	Disinfection

Groundwater Replenishment System (GWRS), Orange County, CA

Orange County's GWRS has been purifying water since 2008. The GWRS produces 100 million gallons per day (mgd) of purified water, enough to meet the needs of nearly 850,000 customers. The advanced treatment system uses microfiltration, reverse osmosis and ultraviolet light with hydrogen peroxide. The purified water is injected into the local aquifer where it blends with the groundwater.

Cleaned Wastewater	Membrane: Microfiltration	Membrane: Reverse Osmosis	Ultraviolet Light/ Advanced Oxidation
	Filtration	Filtration	Disinfection

pureAlta, Altamonte Springs, FL

In 2017, the City of Altamonte Springs launched a potable reuse pilot, pureALTA, to prepare for anticipated water shortages and demonstrate energy-efficient technologies that create a safe and sustainable water supply. The potable reuse pilot treated about 28,000 gallons of water to meet or exceed drinking water standards each day. A full-scale system would treat up to 500,000 gallons of water per day.

Cleaned Wastewater	Ozone + Biological Activated Carbon	Membrane: Ultrafiltration	Granulated Activated Carbon	Ultraviolet Light/ Advanced Oxidation
	Disinfection + Filtration	Filtration	Filtration	Disinfection

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