



# Understanding the Water System in Corpus Christi

The City of Corpus Christi draws water from multiple water sources to meet the drinking water needs of our community. The City operates a water treatment plant and more than 1600 miles of pipes in order to deliver safe and good tasting drinking water.

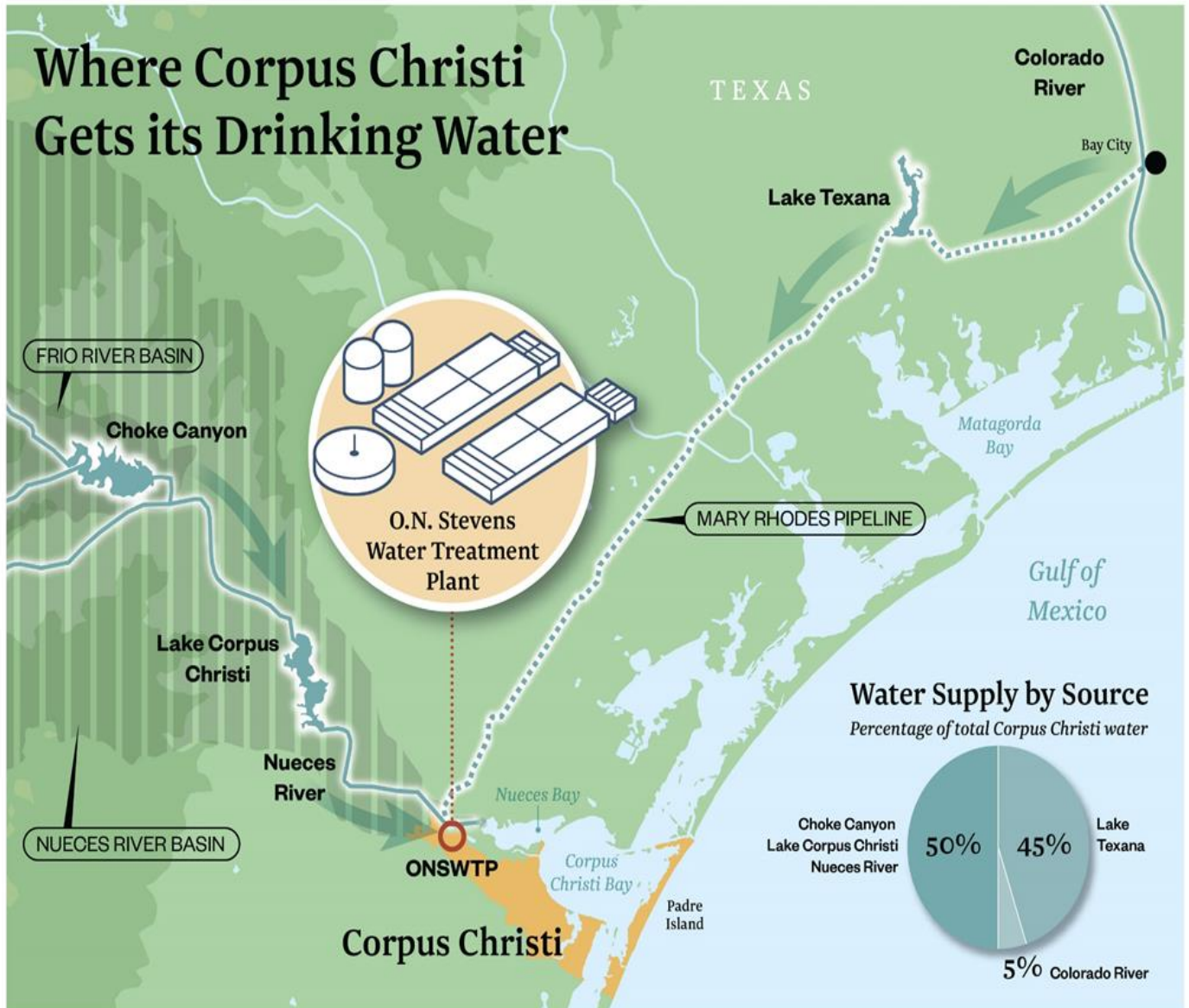
To ensure high quality water, the City maintains monitoring stations and collects samples from 98 water quality sites. These samples are tested at the City’s National Environmental Laboratory Accreditation Program (NELAP) certified laboratory. The City’s continuous maintenance program includes regular inspections of equipment and facilities to ensure they are in working order. Combined with periodic Capital Improvement Projects, this ensures a reliable supply of high-quality water for Corpus Christi’s future.

This brochure answers the following:

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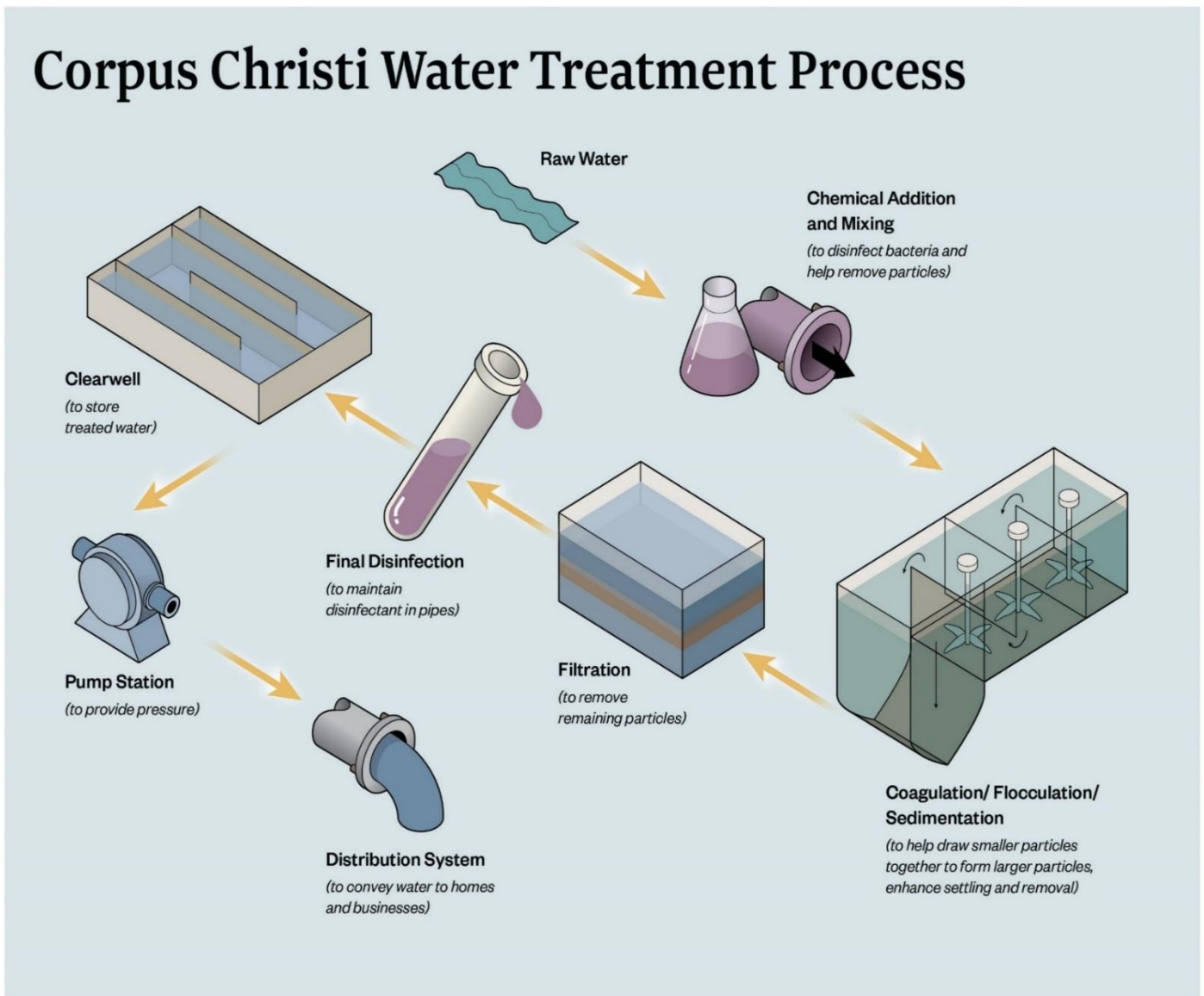
## Where does Corpus Christi's drinking water come from?

Choke Canyon, Lake Corpus Christi, and Lake Texana all store water that is used by the City for drinking water. Recently, the Colorado River has been added as an additional water source to meet Corpus Christi's future water needs.



## How is drinking water treated by the City?

The goal of the water treatment process is to make water safe to drink (potable) and pleasing to taste (palatable) for consumers. The treatment includes chemical and physical processes to remove particles and eliminate disease causing microorganisms. After treatment, the water flows to the community through a system of pumps, tanks, and pipes, which is referred to as the distribution system.



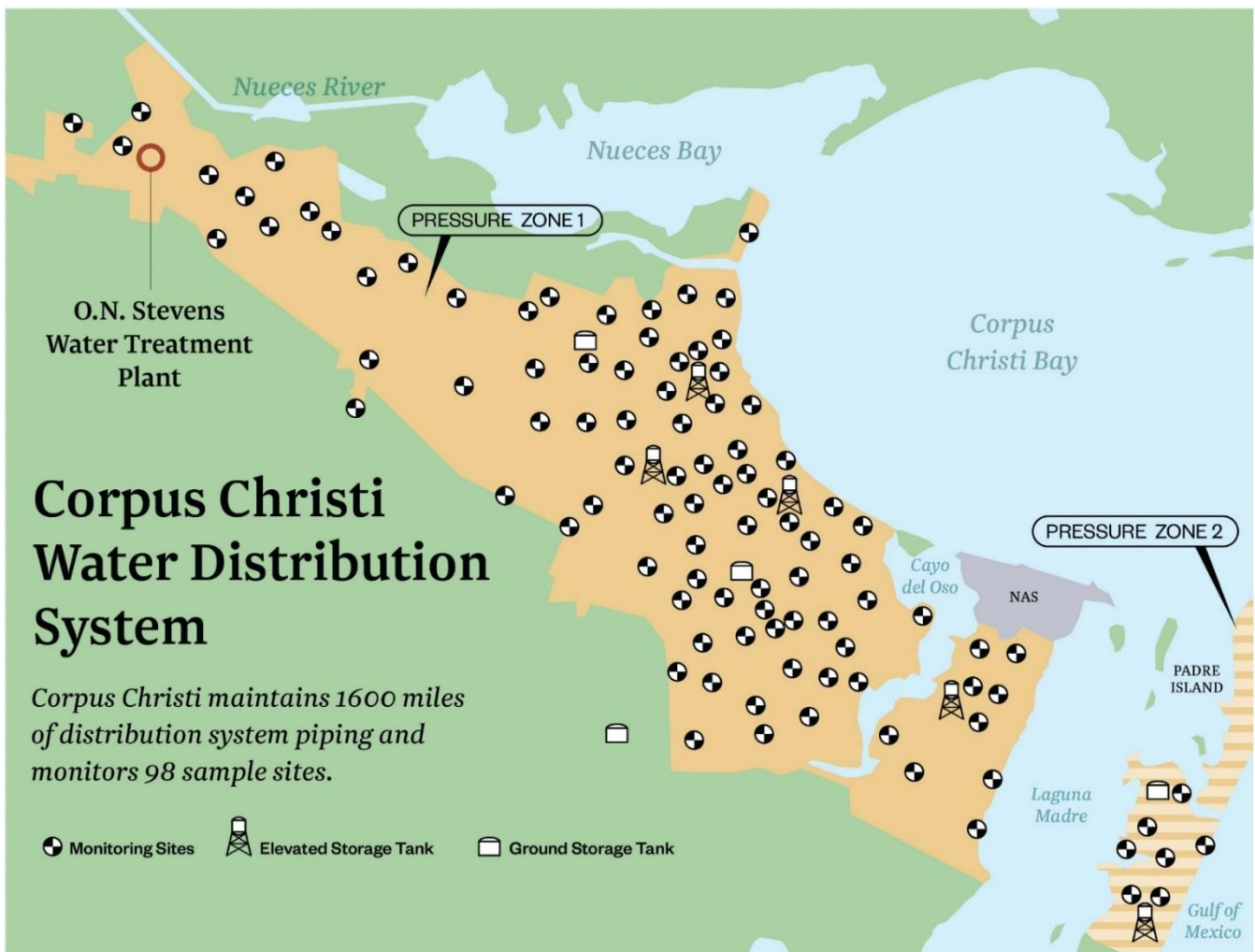
### How much water does the City treat?

On an average, the City treats 80 million gallons of water per day, which is equivalent to the volume of 7,700 average swimming pools (21 feet round pools with 4 feet depth). The City treats water at the O.N Stevens Water Treatment Plant located on the Northwest side of the City, near Calallen. The plant was initially constructed in 1954 and has a total capacity of 161.5 million gallons per day.

### How does water reach your tap from the treatment plant?

Water from the treatment plant is pumped into large transmission pipes and smaller distribution lines which convey water to individual homes, businesses and industries.

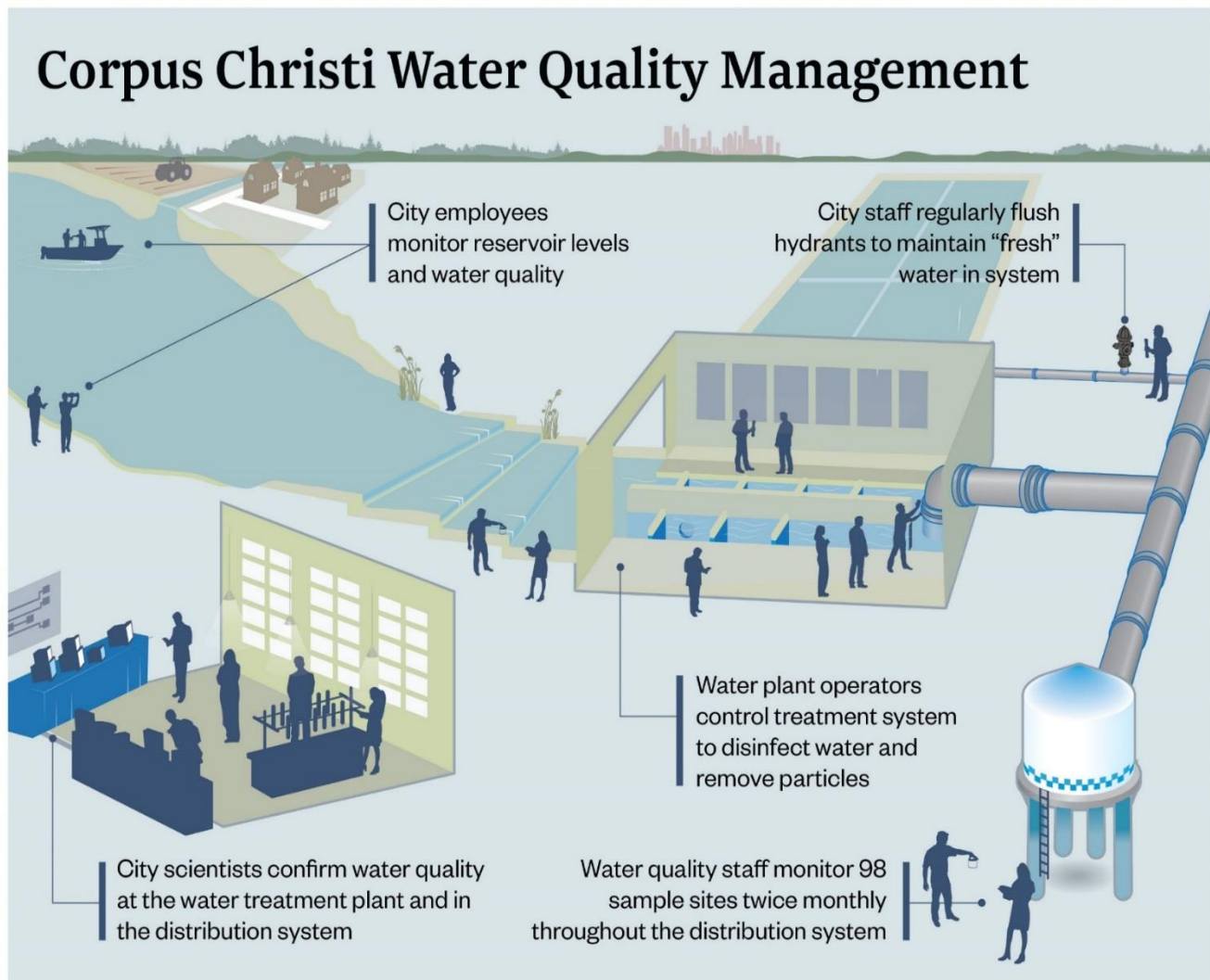
Pump stations and water storage tanks are strategically located throughout the distribution system to maintain pressure and store water in the event of fires or other emergencies.



## How does the City monitor water quality across its wide distribution system?

The City has nine on-line water quality stations that constantly monitor the quality of water across the distribution system. Water quality is also monitored by taking daily samples from a rotating list of 98 sites across the City that are approved by the Texas Commission on Environmental Quality (TCEQ).

The City operates its own state-certified laboratory to perform required testing on the raw water supply and the treated drinking water. The laboratory is certified by the National Environmental Laboratory Accreditation Program (NELAP). It is staffed with highly trained microbiologists, chemists, technicians and sophisticated equipment to ensure measurements are performed in accordance with procedures established by the Environmental Protection Agency (EPA) and TCEQ.



### **What actions does the City perform to ensure safe delivery of high quality drinking water?**

The City maintains and monitors water quality through the following best practices as shown on the Corpus Christi Water Quality Management illustration. Some of the best practices include:

- Dead end main flushing
- Dead end mains replacement by creating a looped pipe arrangement
- Backflow prevention program
- Valve exercises and inspections
- Safe repairs and construction in accordance with regulations
- Daily operations reports and maintenance of comprehensive records.
- Preventative maintenance on equipment
- Routine recalibration of meters and lab equipment
- Capital Improvement Projects
- Nitrification Action Plan implementation
- Water quality monitoring
- Maintenance management program to check and schedule regular maintenance activities.
- Storage tank inspections and cleaning
- Pipe replacement program
- Consulting a wide variety of certified water quality Consultants, Engineers and Scientists who work together to meet State and Federal water standards.

### **What can you do to help the City maintain water quality?**

You play an important role in maintaining the water system and can help the City by taking the following steps:

- Immediately report any noticeable change in water such as a distinct taste, smell or color.
- Install back flow preventers, if using wells or irrigating, and ensure compliance with testing requirements.
- If requested, participate in water monitoring efforts by the City.

### **Who can you call if a problem is noticed in the water supply?**

You can call 361-826-2489 (CITY) to report any problems or issues pertaining to water. The line is also answered 24 hours in the event of a water emergency.