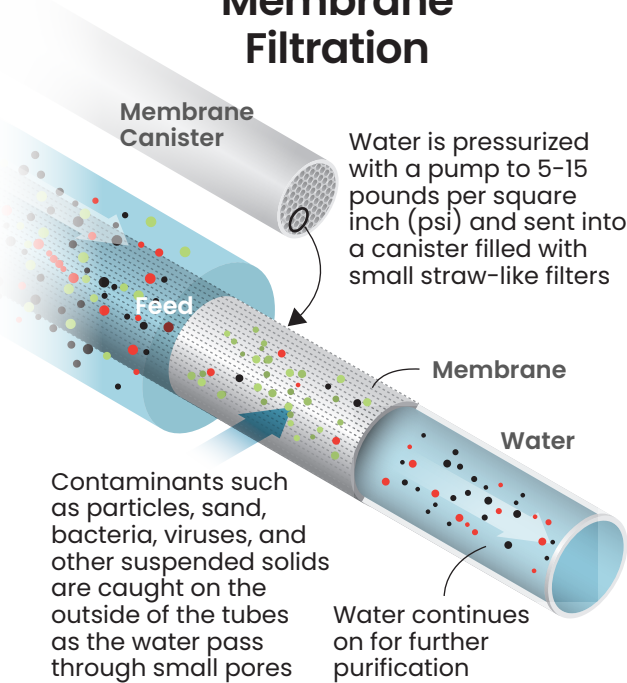


Safeguards are built into the water purification process to ensure that public health is never compromised. Here is a look at Plant City's 3-step process:

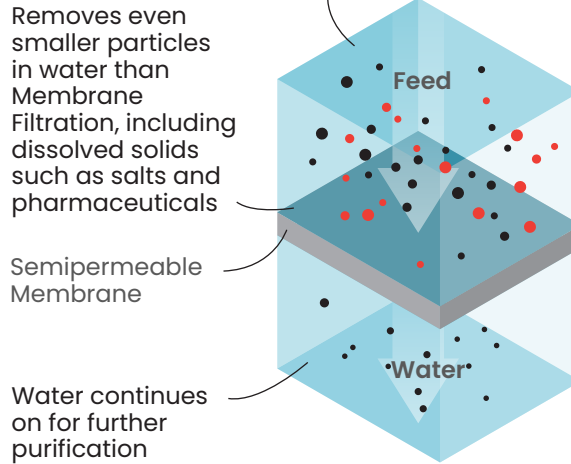
Step 1 Membrane Filtration



Membrane Filtration at Plant City's Demonstration Facility

Step 2 Reverse Osmosis

Uses applied pressure to send water through a semi-permeable membrane that only water and very small molecules can pass through



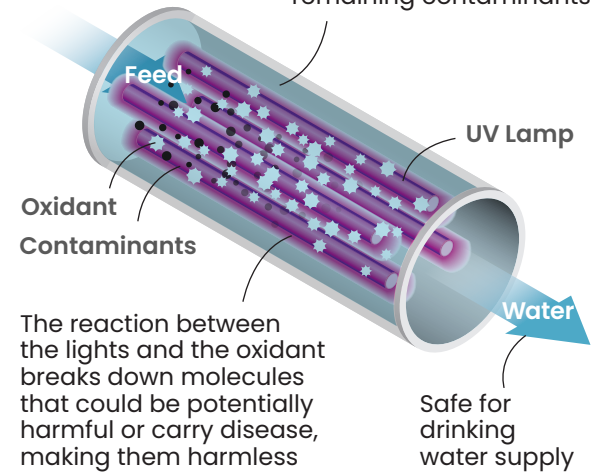
Reverse Osmosis is the heart of the water purification process. This process is used by bottled water companies, as well as on Navy ships and in space to provide clean water supplies.



Reverse Osmosis at Plant City's Demonstration Facility

Step 3 Ultraviolet Disinfection and Advanced Oxidation

Injects ultraviolet light (concentrated sunlight) to react with a chemical called an "oxidant" (such as chlorine, hydrogen peroxide, or ozone) and destroys any remaining contaminants



Ultraviolet Disinfection and Advanced Oxidation at Plant City's Demonstration Facility

The Result: Safe Drinking Water

Safety: Meets all federal and state drinking water standards.

Sustainability: Will benefit Plant City by supplementing our existing potable water supply and offsetting over pumping of our Florida aquifer.



Our Water, Our Future

We are testing water purification technology for a potential full-scale project to create a new drinking water supply that is:



Reliable



Sustainable



Locally-
Controlled

New water supplies will allow the City of Plant City to meet population growth and current and future water demands.



The Purification Process

The City of Plant City Water Reclamation Facility produces highly treated reclaimed water, which is currently used for landscape irrigation, and will be used to supplement wetland hydration as part of the McIntosh Preserve integrated suite of projects.

The **One Water Demonstration Facility** will determine the appropriate advanced treatment technology to further purify the City's reclaimed water to a potable standard that can supplement the local drinking water supply. The pilot project will demonstrate that the selected treatment can safely purify the water to meet all potable water quality standards. The purification process uses the multi-barrier approach of consecutive treatment steps, which work together to remove unwanted materials. Each barrier includes frequent and continuous water quality monitoring.

The City of Plant City McIntosh Preserve Integrated Water Management Plan

Stormwater Treatment

Through expanded wetland treatment systems.

Mitigate Localized Flooding

Adding over 100 acres of managed wetlands and pond systems.

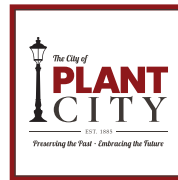


Water Supply

Through potable reuse.

Natural Habitat Park

Walking trails, educational boards, nature preserve.



Plant City Utilities Operations Division

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Plant City, FL 33563
plantcitygov.com



City of Plant City Utilities Department



CityofPlantCity

The technology behind the

PLANT CITY

ONE WATER DEMONSTRATION FACILITY



McIntosh Preserve

PART OF MCINTOSH SUITE OF INTEGRATED PROJECTS



Southwest Florida
Water Management District



Part of McIntosh Suite of Integrated Projects