

Rigorous testing and analysis will be part of the developmental alternatives evaluation. Treatment options for short-listed concepts will be tailored, tested and monitored to ensure the water produced adheres to strict federal, state and local water quality standards.



Background

Developmental alternatives are water supply options that may have a high level of uncertainty due to:

- Sophisticated treatment technologies needed to clean the water,
- The lack of an existing regulatory framework for permitting the water supply,
- And limited public support for lesser-known sources.

These water supply alternatives typically require more long-term analysis and study. With time, technology can advance, processes can be developed, the cost of an alternative may decline, or permitting uncertainties may be resolved.

The 2023 Long-term Master Water Plan, approved in November 2023, included a Developmental Alternatives Program to explore potable reuse to meet demand in the 2043 timeframe. Potable reuse refers to recycled or reclaimed water that is made safe for drinking. Potable reuse can be either direct or indirect.

- **Indirect Potable Reuse (IPR)** – Reclaimed water, extensively treated to meet water quality standards that are protective of human health and compatible with a specific environmental buffer (e.g. a groundwater aquifer, river or reservoir), is discharged into the environmental buffer for storage and blending with another source water before being later withdrawn, treated to high-quality standards, and introduced into the water supply system.
- **Direct Potable Reuse (DPR)** – Reclaimed water, cleaned to high-quality drinking water standards through multi-barrier processes, is introduced directly into the drinking water supply and distribution system.



Developmental Alternatives

Project Overview

In the first phase of the Developmental Alternatives program, Tampa Bay Water will work with its member governments to understand each member's reclaimed water availability and future reclaimed plans. That information is vital to identifying potential water supply concepts that could meet the region's future drinking water needs.

The initial concept list will go through a high-level screening process, after which the project team begin conversations with state and regional permitting agencies and identify questions to be answered for each project. These questions include input received from key stakeholders and the public during the 2023 Long-term Master Water Plan. Public engagement will also play a role in subsequent phases of the Developmental Alternatives program.

Current Regulations

The U.S. Environmental Protection Agency (EPA) does not regulate water reuse, but instead leaves the regulatory authority to the states to allocate and develop reclaimed water resources. State reclaimed water regulations and programs must comply with the Safe Drinking Water Act and the Clean Water Act.

The state of Florida allows highly treated reclaimed water to be used for non-potable applications and to augment groundwaters and surface waters but lacks regulations for potable reuse. The state is in the process of updating its permitting requirements to allow for indirect and direct potable reuse. Tampa Bay Water and its members will closely follow the state's rulemaking to understand how the Developmental Alternatives program will be affected.

Quality

Today's water cleaning technology can be tailored to each source to provide clean, safe water that protects the public's health. Tampa Bay Water adheres to strict federal, state and local water quality standards for all the drinking water it provides to its member governments. Tampa Bay Water uses a multi-barrier approach to water treatment, using more than one type of protection or treatment in a series to remove contaminants and provide overall reliability, redundancy and performance. Each step in the process produces progressively cleaner water.

Treatment options for the short-listed Developmental Alternatives options will be tailored, tested and monitored in Phase 2 to ensure predicted water quality matches the actual outcome.



Benefits

- **Reliability** – Reclaimed water is consistently available from members with a surplus; drought-resistant; not dependent on rain.
- **Resilience** – Aquifer recharge along the coast creates a barrier to prevent saltwater intrusion into fresh groundwater supplies.
- **Sustainability** – Makes use of a water supply that would otherwise be discharged; reduces reliance on groundwater and river water.

Get in Touch

Tampa Bay Water provides wholesale water to the public utility systems of Hillsborough, Pasco and Pinellas counties, as well as the cities of New Port Richey, St. Petersburg and Tampa. Visit tampabaywater.org and futurewater.org to learn more about the region's drinking water and options to meeting future needs.

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