# Our Water Morro Bay Frequently Asked Questions



The City of Morro Bay is developing a local drinking water supply, which will be capable of reducing the City's reliance on imported water from the State Water Project. The City of Morro Bay Water Resources Center is part of the Our Water Program to bring advanced water purification to the region and provide a safe and reliable water source for Morro Bay's homes and businesses.

#### What is the Water Resources Center?

The Water Resources Center is a 1 million gallon per day advanced treatment facility on South Bay Boulevard north of Highway 1 that replaced the City's wastewater treatment plant. The new facility also includes two new lift stations, approximately 3.5 miles of pipelines, and wells to inject the purified water into the groundwater aquifer, which can be extracted for reuse through the City's existing infrastructure. The facility and pipelines were constructed from 2020 to 2023, and the injection wells will be constructed in 2026.

The facility uses a proven, multi-step, advanced purification process to treat wastewater and produce potable quality recycled water that can be injected into the groundwater basin and then extracted for use in the drinking water system. It helps create a drought buffer and will be capable of providing up to 80 percent of the City's water needs in the future.

### Why is the Water Resources Center needed?

The Water Resources Center ensures the City can continue providing reliable wastewater and water service to Morro Bay residents and businesses. As a potable reuse project, the Water Resources Center will produce purified water that can replenish the local groundwater basin and provide a future drinking water supply for homes and businesses.

The former wastewater treatment plant was built in 1952 and was not designed to meet current regulations. To meet state and federal requirements, the City needed a facility located inland away from the coastal zone and hazards, such as sea-level rise, tsunami and flood inundation.

Today's planners also recognize that there is no such thing as "waste" water. All water has value and today's technology makes it possible to purify wastewater and keep it for beneficial use, versus sending it out to the ocean.

#### What are the benefits of the Water Resources Center?

The Water Resources Center will provide the City with a clean, safe, and reliable drinking water supply even during extended periods of drought. The water produced will help replenish the local groundwater basin that provides drinking water for the City, improving quality by adding highly purified water. This new water source will also be locally controlled, reducing reliance on imported water.

#### **How will the Water Resources Center work?**

Wastewater from homes and businesses in Morro Bay will be purified at the Water Resources Center using both the traditional wastewater treatment process and Advanced Water Purification (AWP) in addition to water quality testing to ensure the water meets all state and federal drinking water standards. The purified water will be delivered to injection wells for groundwater replenishment and eventually, drinking water when it's needed. When needed, pump wells will extract the water and add it to the water distribution system. The facility is capable of providing up to 1 million gallons of water per day—providing up to 80 percent of the City's water needs in the future.

#### What is Advanced Water Purification (AWP)?

AWP is a proven technology that mimics nature's water-cycle to produce high-quality drinking water. AWP takes water that is already purified enough to be returned to the environment and uses microfiltration, reverse osmosis, and ultraviolet/advanced oxidation to produce water that is safe to drink. The water can be blended with natural groundwater to replenish the groundwater basin, where it's stored until it's needed for drinking water. AWP's scientifically-proven technology is being used throughout California and the United States.

## What is groundwater replenishment?

Groundwater is water from precipitation that naturally percolates and is stored underground in the soil or in cracks and crevices between rocks. Once recycled water has been purified to meet or exceed drinking water standards, it can be injected into the ground through wells where it will blend with existing groundwater and replenish or "refill" the groundwater basin.

The blended water will be stored for several months before it is pumped out and cleaned one last time before being added to the water system. The condition of groundwater in the Morro Basin has been affected by drought, infrastructure challenges, and saltwater intrusion. Replenishing the groundwater basin with water that can be used for drinking ensures residents and businesses in Morro Bay will have a reliable, renewable supply of water for generations to come.

## How much water will be purified and how much can be extracted?

The City's goal is to utilize local water resources as wisely as possible. The facility will have the ability to provide up to 0.74 million gallons per day (MGD) (825 acre-feet per year) or about 76% of the Water Resources Center's average daily flow design capacity (0.97 MGD). Groundwater modeling results have shown that all recycled water can be used for groundwater injection and extraction in the Morro Valley, and injection locations are being analyzed to determine the maximum amount for groundwater that can be extracted without impacting water quality.

#### How can I learn more about the Water Resources Center?

Send us your questions and comments at morrobaywrf.com/contact-us.