

CLEARWATER PROJECT

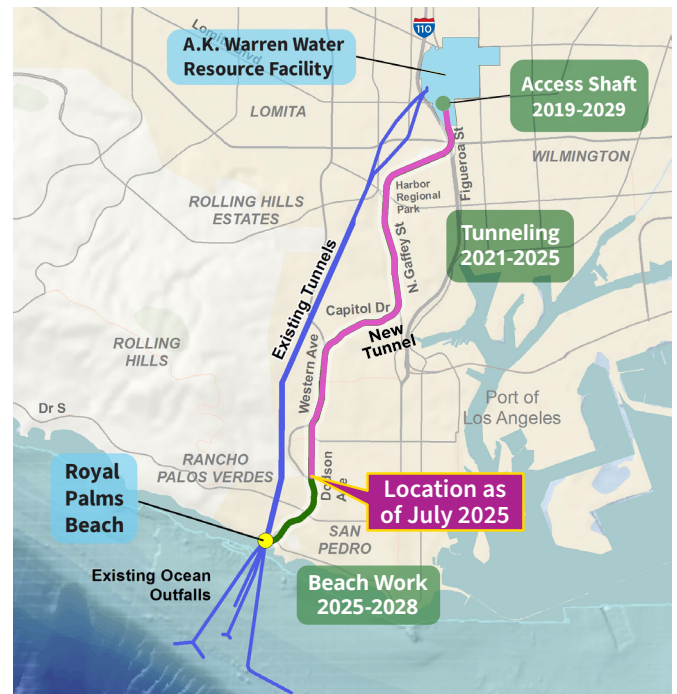
PROTECTING LOCAL
WATERWAYS BY
ADDRESSING AGING
CRITICAL INFRASTRUCTURE

PROJECT OVERVIEW

The Los Angeles County Sanitation Districts operate and maintain the Joint Outfall System (JOS), Los Angeles County's main sewer system. The JOS collects and treats the wastewater (sewage) from over 5 million people in the Los Angeles basin. The A.K. Warren Water Resource Facility (Warren Facility) is the largest wastewater treatment facility in the JOS. A critical component of the JOS is a tunnel and outfall system that conveys treated water from the Warren Facility to the ocean.

In 2012, the Sanitation Districts' Board of Directors approved the Clearwater Project to protect local waterways by addressing aging critical infrastructure. The project is the result of a multi-year planning and environmental review effort that began in 2006. Under the project, a new 7-mile tunnel is being built from the Warren Facility to the existing ocean outfalls located at Royal Palms Beach.

The new tunnel will be almost entirely underneath public right-of-way (streets). Construction began in 2019 in Carson and is scheduled to finish in 2029 at Royal Palms Beach.



NEW TUNNEL ALIGNMENT

WHY THE CLEARWATER PROJECT?

Aging infrastructure concerns - The two existing tunnels, which were built in 1937 and 1958, cannot be taken out of service for inspection and repair because they must continuously carry flow.

Earthquake concerns - The existing tunnels are not built to current earthquake standards, yet they cross two earthquake faults.

Overflow concerns - The capacity of the existing tunnels was almost exceeded during major rainstorms, most recently in February 2024.

Any of these concerns could result in the existing tunnel capacity being exceeded. Such an event would require partially treated or untreated wastewater to be discharged to surrounding waterways, which could lead to environmental degradation for an extended period of time.



CONSTRUCTION (2019-2029)

The project was designed to minimize community impacts by limiting above-ground construction to two sites for tunnel access shafts. The new tunnel began at the Warren Facility access shaft where the tunnel boring machine (TBM) and construction materials (e.g., liner segments) are lowered into the ground and soils from tunneling are removed. The site is screened with a barrier to minimize offsite noise and the visibility of construction activities. Soil from tunneling is hauled away using trucks with modern, clean engines. These trucks are routed north on Figueroa Street, west onto Sepulveda Boulevard, and onto the Harbor Freeway—a route that does not pass any residences.

A smaller shaft is needed at Royal Palms Beach to remove the TBM and connect the new tunnel to the existing ocean outfalls. This site will also be provided with a visual/noise barrier. All construction work will occur Monday through Friday and will mostly be underground, such that once complete, the site will look similar to pre-construction conditions. Work will be confined to as small of an area as possible to minimize the effect on beachgoers and parking. The beach will be accessible at all times.

FREQUENTLY ASKED QUESTIONS

1. WHERE IS THE CLEARWATER TUNNEL PROJECT NOW?

As of July 2025, the TBM is nearing the six--mile mark and is traveling near Dodson Avenue and Western Avenue. With modern TBMs designed to minimize noise and vibration, tunneling activities have not been noticeable from the surface. The TBM is anticipated to reach Royal Palms Beach in 2025.

2. WHICH CITIES/COMMUNITIES ARE INVOLVED?

The alignment for the new tunnel follows public right-of-way (streets) as much as possible to avoid going underneath homes and businesses. The tunnel began under the southwest side of the Warren Facility, then under Figueroa Street, Harbor Regional Park, North Gaffey Street, Capitol Drive, Western Avenue (through South Dodson Avenue), and will end under Royal Palms Beach. The tunnel passed under commercial property to make the turns from Gaffey to Capitol and from Capitol to Western.

3. DOES THE NEW TUNNEL RESULT IN MORE LOCAL TRAFFIC?

Once constructed, the project will have no impact on traffic. During construction, the project requires traffic trips for workers, supplies and the soil from tunneling. The impact of this traffic was analyzed in the project's Environmental Impact Report and found to be less than significant. Nonetheless, we worked with the cities of Carson and Los Angeles on a traffic plan to minimize the impact to the community.

4. HOW DOES TUNNEL CONSTRUCTION AFFECT MY HOME, MY COMMUNITY, AND ME?

The tunnel is being constructed utilizing a state-of-the-art TBM built specifically for this project. The tunnel is 30 to 450 feet



deep and produces no noticeable vibration or noise on the surface. As a safeguard, tunnel construction is being closely monitored using an extensive geotechnical monitoring system consisting of over 1,000 monitoring locations installed along the tunnel alignment. In the unlikely event that movement at the surface is detected, tunneling will be slowed or stopped and the TBM settings will be adjusted. The project is designed to minimize community impacts by limiting construction to two shaft sites (Warren Facility and Royal Palms Beach). Both sites will be screened with barriers to minimize offsite noise and the visibility of construction activities.

5. WHAT ASSURANCES/GUARANTEES CAN THE SANITATION DISTRICTS PROVIDE REGARDING THE POTENTIAL FOR PROPERTY DAMAGE DUE TO TUNNELING ACTIVITIES?

As mentioned above, surface impacts from tunneling are anticipated to be imperceptible. Nonetheless, \$7 million have been invested in the extensive geotechnical monitoring system noted earlier to ensure safe tunneling. Ultimately, the Sanitation Districts' mandate is to safely and responsibly serve the public, which includes accountability for any damage caused by our construction projects.

For more information, call (877) 300-WATER, email us at ClearwaterProject@lacsdc.org, or visit:

 Clearwater.lacsdc.org

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