

**CITY OF LOS ANGELES**  
INTERDEPARTMENTAL CORRESPONDENCE

Date: August 13, 2024

To: Proposition O Citizens Oversight Advisory Committee (COAC)  
Proposition O Administrative Oversight Committee (AOC)

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Subject: **PENMAR WATER QUALITY IMPROVEMENTS STATUS UPDATE**

**Recommendations**

1. Identify and incorporate the Penmar Project (Phase I & II) assets into the Bureau of Sanitation (BOS) asset management system;
2. Continue to evaluate the condition of the Penmar Project (Phase I & II) and determine any necessary repairs and replacements;
3. Coordinate with the LA County Department of Public Health and LA County Public Works to reevaluate existing stormwater capture and use guidelines to support the practical implementation of stormwater capture and use projects;
4. Complete and incorporate findings from the Los Virgenes Municipal Water District and multi-agency collaboration on runoff diversions and integrated water management study; and,
5. Continue to keep the Penmar Water Quality Improvement Phase III Project (Penmar Phase III) on hold until recommendations of the pilot study and discussions with the LA County Department of Public Health can be assessed.

**BACKGROUND**

**Penmar Water Quality Improvement Project Phase I, II and III**

The Penmar Water Quality Improvement Phase I Project (Penmar Phase I) was approved for Proposition O funding in 2007 to help improve water quality (dry and wet) at the Santa Monica Bay beaches, and included a dry weather diversion of the storm drain to sewer and a wet weather diversion to an underground storage reservoir of 2.75 million gallons. Captured stormwater was intended to provide a source of water to be reused to irrigate

Penmar Golf Course, Penmar Park and the City of Santa Monica Marine Park. Construction of Penmar Phase I was completed in 2013.

The Penmar Water Quality Improvement Phase II Project (Penmar Phase II) was designed and constructed to provide treatment of the diverted stormwater for irrigation in compliance with the 2011 Los Angeles County Department of Public Health (LACDPH) “Guidelines for Alternate Water Sources: Indoor and Outdoor Non-Potable Uses” (2011 Guidelines). To meet these guidelines, the project constructed a batch chlorination disinfection system. To meet the 2011 guidelines the City obtained approval from LACDPH for Penmar Phase II in July 2014. Phase II construction began in March 2016 and was completed in September 2018.

In February 2016 LACDPH published updated “Guidelines for Alternative Water Sources: Indoor and Outdoor Non-Potable Uses.” The 2016 adopted guidelines set stringent target standards for spray irrigation. The minimum water quality standards require captured stormwater to meet one of the following criteria: California Maximum Contaminant Levels (MCL), California Toxic Rule (CTR) and National Science Foundation (NSF) 350 or California Code of Regulations (CCR) Title 22 Recycled Water Quality Equivalence at the Point of Use. These standards are typically applied to drinking water standards.

In June 2016 LACDPH sent a revised approval letter to the City requiring Penmar Phase II to meet the newly published guidelines. Given that the Penmar Phase II project was in construction the City continued with completing Phase II per the approved design and would address meeting the 2016 LACDPH guidelines under Penmar Water Quality Improvement Phase III Project (Penmar Phase III). Penmar Phase III would include upgrading the treatment building to include the addition of zeolite filters and replacement of the chlorination system with a UV system.

To fund these upgrades, the Bureau of Sanitation (BOS) secured \$2,541,451 through the State Proposition 84 Integrated Regional Water Management (IRWM) grant for Penmar Phase III. In April 2021, the City Council approved Penmar Phase III for an authorized budget of \$2,541,451 with front funding provided by Proposition O. To meet the December 2022 grant deadline, a design-build delivery approach was intended to be used; however, all bids received were above the City Engineer’s estimate of \$1,660,730. The lowest bid received was \$3,989,000, which is \$2.3M million higher than the City Engineer’s estimate.

The Penmar Phase III budget was not sufficient to award the design-build contract. On March 31, 2022, the Prop O AOC considered a Bureau of Engineering (BOE) report to increase the project budget by \$3.1 million to fill the funding shortfall. The AOC did not approve the budget increase but requested BOE and BOS to identify other funding sources for it, including whether the grantor could provide additional grant funds for the project.

BOS’s request for a grant extension was also not granted because the City could not demonstrate how the funding shortfall would be filled, and the grant funds were repurposed by the grantor.

## **DISCUSSION**

### **LA County Department of Public Health Stormwater Capture Guidelines**

Through a joint effort with the University of California, Los Angeles (UCLA), the Natural Resource Defense Council (NRDC) and BOS collaborated in the preparation of the Penmar Water Quality Improvement Review research paper. The research and finding determined that implementation of the NSF 350 requirements, although well-intentioned, inadvertently created challenges to the goals of offsetting potable demand by using stormwater capture.

The financial and operational burden of meeting current standards for stormwater reuse as spray irrigation have led to implementation and operational challenges. The stormwater reuse challenges observed by this project have prompted a County wide discussion. To work towards practical regulations, Los Angeles County Supervisor Horvath (Third District), has scheduled a September 4th meeting with LACDPH, LA County Department of Public Works (LACDPW), NRDC and BOS to understand the challenges and identify opportunities to revisit the requirements for treating stormwater for irrigation projects.

### **Current Operations & Maintenance**

Proposition O funds are not eligible to support the ongoing operations and maintenance of projects and BOS does not have sufficient resources to adequately maintain all the facilities constructed by the Proposition O program. In addition, since the City was not able to utilize the captured stormwater for irrigation due to the LACDPH requirements, BOS has not performed significant operations and maintenance on the tank and disinfection facilities.

Upon completion of Penmar Phase I in 2013, BOS was responsible for operation of the facility. As was intended, dry weather flow during the dry weather days is diverted to the sanitary sewer for further treatment at the Hyperion Water Reclamation Plant.

Under this operation the City has substantially reduced its dry weather exceedances at the downstream Rose Avenue storm drain outfall. Over the last nine years there have only been two (2) dry weather exceedance days, in 2014 and 2023 respectively, marking a seven-year period, from 2015 to 2022, with no exceedance days reported.

### **Ongoing Improvements**

BOS is implementing system integration and SCADA upgrades at all their facilities, including the Penmar Water Quality Improvement Project, which will allow for remote telemetry monitoring and pump station control to efficiently manage operations, reducing the need for manual operation of the facility.

BOS is currently participating in a pilot study led by with Los Virgenes Municipal Water District (LVMWD), Los Angeles County Sanitation District, LACDPW, City of Los Angeles Department of Water and Power (LADWP) which aims to maximize wet weather diversions, and create a new source of recyclable water, while reducing discharged pollutants to receiving waters through the optimization of existing wet weather diversion projects, like the Penmar Water Quality Improvement Project. The pilot intends to begin physical assessments of the project's ability to manage storm events in the FY 2024/25 storm season with the overall intent of providing a pathway for an alternate project objective of an equal or greater benefit to those set at the inception of the project.

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