



Date: _____

- *Per Brown Act, completing this information is optional. At a minimum, please include an identifier so that you may be called upon to speak.

Please complete this form and email to SafeCleanWaterLA@dpw.lacounty.gov by at least 5:00pm the day prior to the meeting with the following subject line: "Public Comment: [Watershed Area] [Meeting Date]" (ex. "Public Comment: USGR 4/8/20").

Comments

To review the guidance documents and for more information, visit www.SafeCleanWaterLA.org



MEMO

TO: Safe, Clean Water Program Scoring Committee

CC:

FROM: Richard Watson (RWA & Associates), Oliver Galang (Craftwater Engineering)

SUBJECT: Heartwell Park at Palo Verde Stormwater Capture Project
Sanitary Sewer Capacity Benefits for Water Supply

DATE: October 28, 2022

In June 2022, the Gateway Water Management Authority, on behalf of the Los Cerritos Channel Watershed Group, obtained the services of the Los Angeles County Sanitation Districts (LACSD) to perform the sewer capacity analysis for the Heartwell Park at Palo Verde Channel Stormwater Capture Project. The sewer capacity analysis consisted of a sewer flow trace to the Joint Water Pollution Control Plant, assessment of available sewer capacity, and recommendations for allowable sewer discharge rates and times. On *September 26, 2022*, the LACSD completed the sewer capacity study and provided their requirements for the discharge into the sanitary sewer discharge for the project (**Attachment 1**).

This memo evaluates these recommendations provided by the LACSD and the potential water supply benefits for the Heartwell Park at Palo Verde Stormwater Capture Project (Project) to support the submission to the Safe, Clean Water (SCW) Program. The Project Team provides the following project modeling details and letters of coordination and support from potential partnering agencies to ensure the fidelity of the potential water supply benefits that the Project will provide.

1.0 WATER SUPPLY POTENTIAL BENCHMARKS

Because infiltration rates at the Project site were not favorable, the Feasibility Study for this Project assessed multiple possible destinations for captured stormwater as possible alternatives to explore further in design phases. Filtration and return of captured stormwater are the primary mechanism for treatment of the water for this Project, but because this type of treatment only provides water quality benefits, alternative BMP configurations were explored to gage the cost, effectiveness, and water supply benefit magnitude for potential reuse of captured stormwater as well to ensure the maximum utility of the Project.

There are potential reuse options that have been assessed for this Project. The primary option will be to discharge dry-weather flows and captured wet-weather runoff to the sanitary sewer lines that run along Palo Verde Ave (**Figure 1**). Because sanitary sewers can typically handle dry-weather flowrates at most points in the system, diversion of dry-weather runoff to the sanitary sewer will be utilized for this project. During the Design Phase, options for wet-weather runoff will be further evaluated regarding the capacity for water for the two options, the usability of this water, and the infrastructure needed to deliver it from the BMP. Because a full assessment of

sewer capacity is a costly analysis, it is feasible to conduct the analysis during the design phase of the project. However, multiple potential pathways to utilize wet-weather runoff have been evaluated to the greatest extent possible at this stage of project development. To estimate the potential contributions of each of these options, water supply benchmarks have been developed to provide a reliable bookending for the potential benefits of the Project at the early stages of feasibility assessment. These benchmarks have been summarized in **Table 1**. The intermediate value was used for the original submission of the Project to the SCW Program, and this is a conservative estimate for sanitary sewer discharge at the Feasibility stage that will be further refined during Design with full capacity analysis.

Table 1. Summary of Water Supply Benchmarks for Heartwell Park Project.

Discharge Option	Estimated Outflows	Estimated Annual Benefit	Project Incorporation
Discharge of Dry-Weather Flows Only	0.037 cfs (modeled dry-weather flow)	26.8 ac-ft/yr	Option will be incorporated
Off-Peak Discharge of Captured Stormwater	2 – 3 cfs (During off-peak hours only)	102 ac-ft/yr	Conservative vs. Full Potential Estimates of Water Supply from wet-weather runoff; Final volume will be confirmed during full design
Full Reuse of Captured/Filtered Stormwater	7.8 cfs (Rate of Filtration Device)	428 ac-ft/yr	



Figure 1. Sanitary sewer mains running adjacent to Heartwell Park provide multiple options for discharged runoff.

2.0 WATER AGENCY COORDINATION

To demonstrate the coordination with applicable water agencies from the earliest stages of the Heartwell Park Project and that the captured water will truly provide a benefit, letters of coordination with the following water agencies/personnel have been attached:

- Esther Rojas, Water Replenishment District
- Anatole Falagan, Long Beach Water Department
- Kristen Ruffel, Sanitation Districts of Los Angeles County

3.0 SEWER CAPACITY UPDATES

Preliminary submission of this project and its details was based upon estimates of potential sewer capacity discharge rates and temporal windows. On September 26, 2022, the LACSD provided the sewer capacity

requirements for potential discharge of this project to LACSD assets adjacent to the project site (**Attachment 1**). The estimated and verified discharge rates are summarized below (**Table 2**).

Table 2. Summary of previously estimated and recently verified sewer discharge allowances.

Discharge Criteria	Original Estimates	LACSD Verified Values
Peak Hours	8:00am – 10:00pm	6:00am – 12:30am
Max. Peak Discharge Rate	0.037 cfs	0.05 cfs
Non-Peak Hours	10:00pm – 8:00am	12:30am – 6:00am
Max. Non-Peak Discharge Rate	2.75 cfs	3.0 cfs

Verified discharge allowances represent slightly higher flowrates than estimated but with a much shorter window for non-peak discharges than originally estimated. Because of this, previously expected performance is less than expected and changes in project configuration are warranted. The previously sized BMP (50-cfs diversion rate, 9.88 ac-ft storage) was modeled with these verified sewer discharge rates applied to determine the magnitude of these changes and how they might relate to filtration devices recommended. The use of both filtration and sewer discharge provides balanced treatment options for the project that provide both water quality and water supply benefits, but the two components must be balanced to optimize the provision of both important regional emphases in stormwater management. The results of this analysis are shown in **Figure 2** and show the relationship between all these variables. Based on these results, a filtration rate of 4 cfs is recommended for this project as it will maximize overall runoff capture while balancing the amount treated via filtration with that treated via discharge to the sanitary sewer, which also contributes to regional water supply and stormwater reuse goals. Capture and treatment estimates for this option are summarized in **Table 3**.

Table 3. Stormwater capture estimates for verified sewer discharge rates and filtration at 4 cfs.

Total Capture (ac-ft/yr)	Discharge to Sewer (ac-ft/yr)	Filtered & Returned (ac-ft/yr)
247.2	106.9	140.3

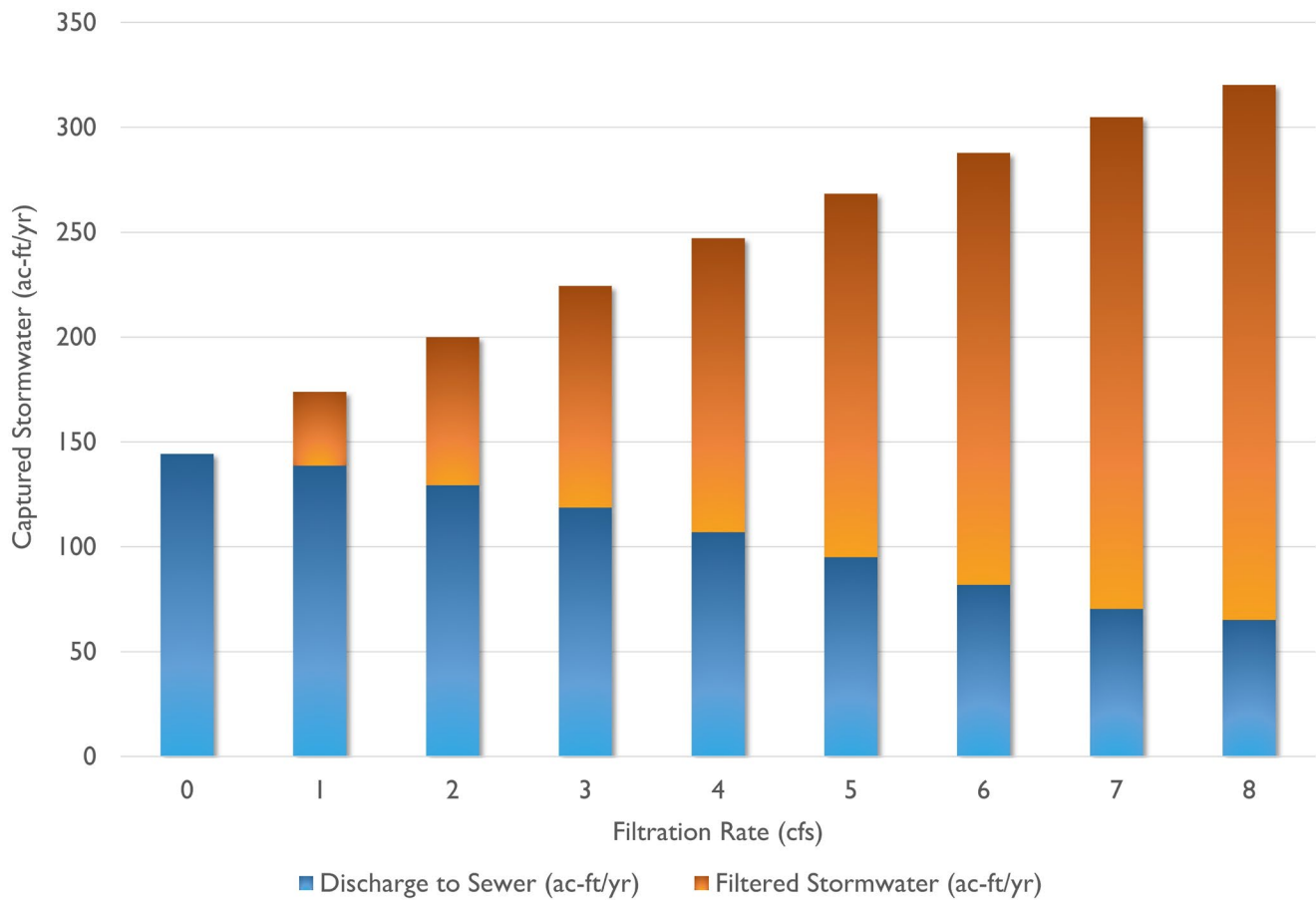


Figure 2. Stormwater capture and fate vary with filtration rates used under expected project operations.

4.0 ATTACHMENTS

1. Los Angeles County Sanitation Districts Sewer Capacity Study, September 26, 2022
2. Heartwell Park Project – Water Replenishment District Support, November 30, 2021
3. Heartwell Park Project – Long Beach Water Support Letter

From: [Pierce, Dave](#)
To: [Oliver Galang](#)
Cc: [Ruffell, Kristen](#)
Subject: FW: DRAFT Sewer capacity study for the Heartwell Park Project
Date: Monday, September 26, 2022 4:02:19 PM
Attachments: [image001.png](#)
[image002.png](#)

CAUTION: External Sender

Oliver

Based on our analysis with a connection at our MH 03 0035, the collection system can accommodate a continuous discharge of 0.05 cfs, with a discharge of 3 cfs during the off-peak hours of 12:30am and 6:00am. Please note that the allowable peak discharge window is less than what you anticipated. We cannot accommodate a 4 cfs discharge.

- The use of VFCs will be required to send us a smooth flow and avoid flow spikes.
- The control system will need to communicate with Districts' telemetry. There needs to be a run permissive from the Districts to allow discharge to the sewer. The loss of signal will prevent discharge.
- The analysis was based on the facility holding the water until after any wet weather effects on the collection system have dissipated. IW's standard permit condition requires stormwater to be held for 24-hrs after the end of rain.

There are other projects that are discharging to that same flow path (e.g., El Dorado Regional Park and discharges from the Haynes Generation Station).

We're in the process of evaluating how those projects interact with each other. We will need to determine how the projects can share the available capacity, and potentially either adjust the times at which discharges occurs or establish reduced flow limits. I look forward to seeing your design info and proposed control description when they're available.

Please let me know if you'd like to discuss.

Thanks.

Dave Pierce

Supervising Engineer | Water Quality Section
562-908-4288 ext. 2513
dpierce@lacsdsd.org



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November 30, 2021

Richard Watson
Consultant to the Los Cerritos Watershed Group
21922 Viso Lane
Mission Viejo, CA 92691

Re: Heartwell Park Project- WRD support

Dear Mr. Watson,

The Water Replenishment District (WRD) is in support of the City of Long Beach's Heartwell Park at Palo Verde Stormwater Capture Project (Heartwell Project). The Heartwell Project compliments WRD's WIN 4 ALL initiative to further increase the regional sustainability of our groundwater basins through the implementation of groundwater storage and augmentation programs.

The WRD has utilized supplies from the Long Beach Water Reclamation Plant (LBWRP) as influent to our Leo J Vander Lans Advanced Water Treatment Facility (LVL) for groundwater recharge for many years and any increase in the availability and resiliency of those supplies would be beneficial to the health of our basins. Specifically, the LVL facility has a capacity of 8 mgd; however, due to a lack of source water, its use is only 6 mgd. With the implementation of the Heartwell Project, the additional supplies that will be conveyed to the LBWRP can be used as source water to increase LVL's capacity. Thus, improving the sustainability of our groundwater basins, which benefits our community and environment.

Once again, WRD supports the Heartwell Project, which has the potential to provide significant regional benefits. Please contact me if you have any questions at rbeste@wrdd.org or 562-921-5521.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rob Beste", is written over a light blue horizontal line.

Rob Beste
Assistant General Manager



Long Beach Water

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Christopher J. Garner
General Manager

1800 E. Wardlow Road, Long Beach, CA 90807-4931
562.570.2300 | lbwater.org

Richard Watson
Consultant to the Los Cerritos Channel Watershed Group
21922 Viso Lane
Mission Viejo, CA 92691

**Subject: City of Long Beach/Los Cerritos Channel Watershed Group
Heartwell Park at Palo Verde Channel Support Letter**

Dear Mr. Watson:

The Long Beach Water Department (LBWD) is in support of the Heartwell Park at Palo Verde Channel Stormwater Capture Project (Heartwell Park Project).

The Heartwell Park Project proposes a sanitary sewer diversion from the Palo Verde Channel and could deliver an estimated 102 acre-feet annually to the Long Beach Water Reclamation Plant (LBWRP). The LBWRP provides influent to the Leo J Vander Lans Advanced Water Treatment Facility (LVL Facility) which delivers its supply to the Los Alamitos Seawater Barrier (Barrier). The Barrier protects the groundwater basin from seawater intrusion, and offsets potable water demand that has historically supplied the Barrier.

By providing a water source that can be used to supplement flows to the LBWRP, and consequently flows to the Barrier, the Heartwell Park Project provides multiple water supply benefits to LBWD:

- **Enhanced recycled water flow.** The LBWRP not only provides water to the LVL Facility and Barrier. The LBWRP is also the source of LBWD's recycled water supply, which is used to offset potable water for irrigation throughout the City. With water conservation reducing sewer flows, supplementing the inflow to the LBWRP contributes to the sustainability of recycled water, which is critical for LBWD to offset potable water for irrigation.
- **Enhanced source water for the LVL Facility and Barrier.** The water produced by the LBWRP also serves as the source water for the LVL Facility and the Barrier, offsetting the demands for potable water at the Barrier. Sustained operations of the Barrier are critical to protect the groundwater basin, the source of the critical, most affordable and sustainable water supply for LBWD and the City of Long Beach.



Again, LBWD supports the Heartwell Park Project, which provides the multiple, critical water supply benefits identified above. Please contact me if you have any questions at chris.garner@lbwater.org or at 562-570-2318.

Sincerely,

Chris Garner, General Manager
Long Beach Water Department



Date: _____

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Comments

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October 31, 2022

To: Los Angeles County Safe Clean Water Program

Attention: Central Santa Monica Bay Watershed Area Committee
Scoring Committee, Regional Oversight Committee

Subject: Imperial Highway Green Infrastructure Project Clean Water Program
-Fiscal Year 24 - 25 Stormwater Investment Plan Consideration

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Dear Safe Clean Water Committee Members,

On behalf of Los Angeles World Airports, I am writing to express our support for Los Angeles Sanitation and Environment's (LA Sanitation) proposed Imperial Highway Green Infrastructure Project for the Safe Clean Water Program's Regional Infrastructure Program Fiscal Year 24 - 25 Stormwater Investment Plan (SIP).

The Project area extends along Imperial Highway from California Street to Vista del Mar in Westchester and is bounded on the north by the Los Angeles International Airport (LAX) and on the south by the City of El Segundo. The Imperial Highway Green Infrastructure Project will provide multiple benefits to the community and will help protect our beaches from contaminants that can make people sick and threaten marine life, consistent with the water quality goals outlined in the Safe Clean Water Program.

The project presents numerous public health, safety and community investment benefits for the residents of the cities of Los Angeles and El Segundo; visitors to Dockweiler State Beach; and employees and visitors accessing the south side of LAX.

It is critical that the Imperial Highway Green Infrastructure Project be approved for Safe Clean Water Program funding to address community concerns. The Imperial Highway Green Infrastructure Project will substantially enhance the experience for members in the community. Improving the bike path experience will further encourage mobility, connectivity between communities, and local sustainability. Improvements to the median will enhance pedestrian safety and accessibility. Furthermore, bioswales and drywells placed throughout the median will alleviate any localized flooding in the area.

As we look at how City of Los Angeles can move forward, we must assure that we can create healthier, resilient and more sustainable communities and protect our residents. Essential to this effort is ensuring our local communities have clean waterways and



water supplies that meet water quality and public health standards. The Imperial Highway Green Infrastructure Project can play a vital role in achieving this objective.

The Imperial Highway Green Infrastructure Project is an ideal example of a multi-benefit project meeting the criteria, vision and mission of the Safe Clean Water Program. We are proud to lend our support.

Thank you for your consideration.

Sincerely,

Samantha Bricker

Samantha Bricker
Chief Sustainability & Revenue Officer
Los Angeles World Airports